Christian B Fischer

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8545969/publications.pdf

Version: 2024-02-01

44	675	643344	651938
papers	citations	15 h-index	25 g-index

45	45	45	585
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Titanium nitride, TiXN(1â^'X), coatings deposited by HiPIMS for corrosion resistance and wear protection properties. Applied Surface Science, 2022, 574, 151635.	3.1	31
2	Influence of Annealing Temperature on the Microstructure and Hardness of TiN Coatings Deposited by High-Power Impulse Magnetron Sputtering. Journal of Materials Engineering and Performance, 2022, 31, 5593-5601.	1.2	4
3	High-resolution particle size and shape analysis of the first Samarium nanoparticles biosynthesized from aqueous solutions via cyanobacteria Anabaena cylindrica. NanoImpact, 2022, 26, 100398.	2.4	10
4	Surface treatment of biopolymer films Polylactic acid and Polyhydroxybutyrat with angular changing oxygen plasma â€' More than just gradual purification. Surfaces and Interfaces, 2022, 30, 101856.	1.5	3
5	Photoaging phenomena of biodegradable polybutylene succinate and conventional low density polyethylene by artificial weathering â€“ A comparative surface study. Applied Surface Science, 2022, 590, 153058.	3.1	5
6	Synchrotron-based spectroscopic study of plasma generated amorphous hydrogenated carbon films (a-C:H) post-functionalized using photochemically active ruthenium-polypyridyl complexes. Journal of Electron Spectroscopy and Related Phenomena, 2022, 257, 147204.	0.8	0
7	Comparing the Influence of Residual Stress on Composite Materials Made of Polyhydroxybutyrate (PHB) and Amorphous Hydrogenated Carbon (a-C:H) Layers: Differences Caused by Single Side and Full Substrate Film Attachment during Plasma Coating. Polymers, 2021, 13, 184.	2.0	3
8	Layered aluminum tri-polyphosphate as intercalation host for 6-aminohexanoic acid â€“ Synthesis, characterization and application as corrosion protection inhibitor for low carbon steel. Corrosion Science, 2021, 181, 109239.	3.0	7
9	Plasma Supported Deposition of Amorphous Hydrogenated Carbon (a-C:H) on Polyamide 6: Determining Interlayer Completion and Dehydrogenation Effects during Layer Growth. Polymers, 2021, 13, 1886.	2.0	5
10	The Growth Behavior of Amorphous Hydrogenated Carbon a-C:H Layers on Industrial Polycarbonatesâ€"A Weak Interlayer and a Distinct Dehydrogenation Zone. Journal of Carbon Research, 2021, 7, 59.	1.4	1
11	Microstructures, mechanical properties and tribological behaviors of amorphous carbon coatings in-situ grown on polycarbonate surfaces. Applied Surface Science, 2021, 563, 150309.	3.1	11
12	Introduction of an innovative corrosion-protective alkyd steel coating based on a novel layered aluminum tripolyphosphate loaded with 6-amino hexanoic acid (ATP-6-AHA). Progress in Organic Coatings, 2021, 161, 106500.	1.9	2
13	Effect of 6-Aminohexanoic Acid Released from Its Aluminum Tri-Polyphosphate Intercalate (ATP-6-AHA) on the Corrosion Protection Mechanism of Steel in 3.5% Sodium Chloride Solution. Corrosion and Materials Degradation, 2021, 2, 666-677.	1.0	3
14	Novel strategy to improve the tribological property of polymer: In-situ growing amorphous carbon coating on the surface. Applied Surface Science, 2020, 505, 144626.	3.1	9
15	The effect of magnetic field configuration on structural and mechanical properties of TiN coatings deposited by HiPIMS and dcMS. Surface and Coatings Technology, 2020, 404, 126572.	2.2	23
16	Effect of Cellulose Nanocrystals on the Coating of Chitosan Nanocomposite Film Using Plasma-Mediated Deposition of Amorphous Hydrogenated Carbon (aâ€"C:H) Layers. Journal of Carbon Research, 2020, 6, 51.	1.4	3
17	Influence of cellulose microfiber reinforcement for polyvinyl alcohol on the layer growth of plasma-deposited a-C:H. Diamond and Related Materials, 2020, 109, 108065.	1.8	2
18	Refinement of Sustainable Polybutylene Adipate Terephthalate (PBAT) with Amorphous Hydrogenated Carbon Films (a-C:H) Revealing Film Instabilities Influenced by a Thickness-Dependent Change of sp2/sp3 Ratio. Materials, 2020, 13, 1077.	1.3	9

#	Article	IF	Citations
19	Changing Contents of Carbon Hybridizations in Amorphous Hydrogenated Carbon Layers (a-C:H) on Sustainable Polyhydroxybutyrate (PHB) Exhibit a Significant Deterioration in Stability, Depending on Thickness. Journal of Carbon Research, 2019, 5, 52.	1.4	11
20	Specifying the interlayer turning point and dehydrogenation in a-C:H layers plasma deposited on high-density polyethylene with X-ray synchrotron techniques. Thin Solid Films, 2019, 691, 137617.	0.8	9
21	Quantitative analysis of PET microplastics in environmental model samples using quantitative 1H-NMR spectroscopy: validation of an optimized and consistent sample clean-up method. Analytical and Bioanalytical Chemistry, 2019, 411, 7409-7418.	1.9	27
22	Concentration and coating time effects ofN-acyl sarcosine derivatives for corrosion protection of low-carbon steel CR4 in salt water â€“ defining the window of application. Corrosion Engineering Science and Technology, 2019, 54, 216-224.	0.7	6
23	Prediction of a-C:H layer failure on industrial relevant biopolymer polylactide acide (PLA) foils based on the sp2/sp3 ratio. Surface and Coatings Technology, 2019, 368, 79-87.	2.2	14
24	Cyanobacterial promoted enrichment of rare earth elements europium, samarium and neodymium and intracellular europium particle formation. RSC Advances, 2019, 9, 32581-32593.	1.7	14
25	Attaching Photochemically Active Ruthenium Polypyridyl Complex Units to Amorphous Hydrogenated Carbon (aâ€C:H) Layers. Advanced Materials Interfaces, 2019, 6, 1801308.	1.9	4
26	Evolution of the sp2 content and revealed multilayer growth of amorphous hydrogenated carbon (a-C:H) films on selected thermoplastic materials. Carbon, 2017, 117, 351-359.	5.4	22
27	Improved water barrier properties of polylactic acid films with an amorphous hydrogenated carbon (a-C:H) coating. Carbon, 2017, 120, 157-164.	5.4	16
28	Surface protection of low carbon steel with N-acyl sarcosine derivatives as green corrosion inhibitors. Surfaces and Interfaces, 2017, 9, 70-78.	1.5	21
29	Bioselective synthesis of gold nanoparticles from diluted mixed Au, Ir, and Rh ion solution by Anabaena cylindrica. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	3
30	Time-dependent growth of crystalline Au⁰-nanoparticles in cyanobacteria as self-reproducing bioreactors: 2. Anabaena cylindrica. Beilstein Journal of Nanotechnology, 2016, 7, 312-327.	1.5	32
31	Morphological and Chemical Evolution of Gradually Deposited Diamond-Like Carbon Films on Polyethylene Terephthalate: From Subplantation Processes to Structural Reorganization by Intrinsic Stress Release Phenomena. ACS Applied Materials & Interfaces, 2016, 8, 10636-10646.	4.0	36
32	Amorphous hydrogenated carbon (a-C:H) depositions on polyoxymethylene: Substrate influence on the characteristics of the developing coatings. Surface and Coatings Technology, 2016, 307, 658-665.	2.2	19
33	Characteristics of industrially manufactured amorphous hydrogenated carbon (a-C:H) depositions on high-density polyethylene. Carbon, 2016, 96, 661-671.	5.4	41
34	Surface morphology and grain analysis of successively industrially grown amorphous hydrogenated carbon films (a-C:H) on silicon. Applied Surface Science, 2015, 347, 657-667.	3.1	47
35	DLCâ€coated pure bioplastic foil. Vakuum in Forschung Und Praxis, 2014, 26, 42-47.	0.0	14
36	Time-dependent growth of crystalline Au0-nanoparticles in cyanobacteria as self-reproducing bioreactors: 1. Anabaena sp.. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	33

#	Article	IF	Citations
37	Interlayer formation of diamond-like carbon coatings on industrial polyethylene: Thickness dependent surface characterization by SEM, AFM and NEXAFS. Applied Surface Science, 2013, 271, 381-389.	3.1	38
38	Diamond-like carbon coating of a pure bioplastic foil. Thin Solid Films, 2013, 545, 558-563.	0.8	28
39	PlasmaunterstÃ¼tzte DLCâ€Beschichtung von Kunststoffen. Vakuum in Forschung Und Praxis, 2013, 25, 36-41.	0.0	1
40	Preparation and Study of Bacterial Layers on SWCNT Films with Subsequent Carbonization. The Open Surface Science Journal, 2009, 1, 50-53.	2.0	0
41	Steric Effects in the Uncatalyzed and DMAP-Catalyzed Acylation of Alcoholsâ€"Quantifying the Window of Opportunity in Kinetic Resolution Experiments. Chemistry - A European Journal, 2006, 12, 5779-5784.	1.7	74
42	Synthesis and Solid-State Structures of Alkyl-Substituted 3-Cyano-2-pyridones.. ChemInform, 2005, 36, no.	0.1	0
43	Catalysis of aminolysis ofp-nitrophenyl acetate by 2-pyridones. Journal of Physical Organic Chemistry, 2005, 18, 901-907.	0.9	17
44	Synthesis and Solid-State Structures of Alkyl-Substituted 3-Cyano-2-pyridones. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2004, 59, 1121-1131.	0.3	10