Peter Hammer

List of Publications by Year
in descending order

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129 papers	4,372 citations	81743 39 h-index	128067 60 g-index
130 all docs	130 docs citations	130 times ranked	5079 citing authors

#	Article	IF	Citations
1	Nanostructured Poly(methyl Methacrylate)â€“Silica Coatings for Corrosion Protection of Reinforcing Steel. ACS Applied Nano Materials, 2022, 5, 2603-2615.	2.4	9
2	On the performance of self-organized TiO2 nanotubes@MnOx as supercapacitor: Influence of the heat treatment, cathodic treatment, water aging, and thermal oxides. Electrochimica Acta, 2022, 408, 139898.	2.6	4
3	Amine functionalization of carbon nanotubes with solid urea using different plasma treatments. Applied Surface Science, 2022, 583, 152493.	3.1	6
4	Self-healing nanocoatings. , 2022, , 371-401.		2
5	Effect of the interlamellar anion on CuMgFe-LDH in solar photo-Fenton and Fenton-like degradation of the anticancer drug 5-fluorouracil. Applied Catalysis B: Environmental, 2022, 315, 121537.	10.8	15
6	Green-High-Performance PMMAâ€“Silicaâ€“Li Barrier Coatings. Corrosion and Materials Degradation, 2022, 3, 303-319.	1.0	3
7	Protective PMMA-silica coatings for aluminum alloys: Nanostructural control of elevated thermal stability and anticorrosive performance. Progress in Organic Coatings, 2021, 152, 106129.	1.9	14
8	A new approach on synergistic effect and chemical stability of graphene oxide-magnetic nanocomposite in the heterogeneous Fenton degradation of caffeine. Environmental Science and Pollution Research, 2021, 28, 55014-55028.	2.7	8
9	Fenton-like degradation of sulfathiazole using copper-modified MgFe-CO3 layered double hydroxide. Journal of Hazardous Materials, 2021, 413, 125388.	6.5	38
10	Effect of Ce(III) and Ce(IV) ions on the structure and active protection of PMMA-silica coatings on AA7075 alloy. Corrosion Science, 2021, 189, 109581.	3.0	19
11	Fast and Inexpensive Synthesis of Multilayer Graphene Used as Pd Support in Alkaline Direct Ethanol Fuel Cell Anode. Electrocatalysis, 2021, 12, 715.	1.5	1
12	Electrocatalysts based on low amounts of palladium combined with tin nanoparticles and cerium dioxide nanorods for application as ADEFC anodes. International Journal of Hydrogen Energy, 2021, 46, 39438-39456.	3.8	7
13	Smart PMMAâ€˜cerium oxide anticorrosive coatings: Effect of ceria content on structure and electrochemical properties. Progress in Organic Coatings, 2021, 161, 106548.	1.9	5
14	Simultaneous degradation of the anticancer drugs 5-fluorouracil and cyclophosphamide using a heterogeneous photo-Fenton process based on copper-containing magnetites (Fe3-xCuxO4). Chemosphere, 2020, 241, 124990.	4.2	41
15	Effective corrosion protection by eco-friendly self-healing PMMA-cerium oxide coatings. Chemical Engineering Journal, 2020, 383, 123219.	6.6	66
16	Barrier properties of high performance PMMA-silica anticorrosion coatings. Progress in Organic Coatings, 2020, 138, 105398.	1.9	31
17	A comparative study on PMMA-TiO2 and PMMA-ZrO2 protective coatings. Progress in Organic Coatings, 2020, 140, 105477.	1.9	25
18	Surface composition and catalytic activity of an iron mining residue for simultaneous degradation of sulfonamide antibiotics. Environmental Science and Pollution Research, 2020, 27, 1710-1720.	2.7	9

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19	Microwave synthesis of Ti/(RuO2)0.5(IrO2)0.5 anodes: Improved electrochemical properties and stability. Journal of Electroanalytical Chemistry, 2020, 874, 114460.	1.9	30
20	On the stability of the passive Ti-6Al-4V film of friction stir welds with stainless steel: Effect of not native metal species. Electrochimica Acta, 2020, 358, 136900.	2.6	7
21	Sn-containing electrocatalysts with a reduced amount of palladium for alkaline direct ethanol fuel cell applications. Renewable Energy, 2020, 158, 49-63.	4.3	18
22	Influence of the RuO2 layer thickness on the physical and electrochemical properties of anodes synthesized by the ionic liquid method. Electrochimica Acta, 2020, 354, 136625.	2.6	16
23	Advanced organic nanocomposite coatings for effective corrosion protection. , 2020, , 315-343.		5
24	Hydroxyapatite and Î²-TCP modified PMMA-TiO2 and PMMA-ZrO2 coatings for bioactive corrosion protection of Ti6Al4V implants. Materials Science and Engineering C, 2020, 116, 111149.	3.8	39
25	PMMA-silica nanocomposite coating: Effective corrosion protection and biocompatibility for a Ti6Al4V alloy. Materials Science and Engineering C, 2020, 110, 110713.	3.8	24
26	Dual Role of Lithium on the Structure and Self-Healing Ability of PMMA-Silica Coatings on AA7075 Alloy. ACS Applied Materials & Interfaces, 2019, 11, 40629-40641.	4.0	27
27	Degradation of Acid Red 8 Dye Using Photo-Fenton Reaction Mediated by Titanium Modified Catalysts. Journal of the Brazilian Chemical Society, 2019, , .	0.6	2
28	Insights in the Study of the Oxygen Reduction Reaction in Direct Ethanol Fuel Cells using Hybrid Platinumâ€Ceria Nanorods Electrocatalysts. ChemElectroChem, 2019, 6, 5124-5135.	1.7	9
29	Carbon nanotube plasma functionalization: The role of carbon nanotube/maleic anhydride solid premix. Applied Surface Science, 2019, 491, 405-410.	3.1	17
30	Recent Advances in Nanostructured Polymer Composites for Biomedical Applications. , 2019, , 21-52.		4
31	Self-supported nickel nanoparticles on germanophosphate glasses: synthesis and applications in catalysis. RSC Advances, 2019, 9, 17157-17164.	1.7	8
32	Faujasites exchanged with alkylammonium cations applied to basic catalysis. Microporous and Mesoporous Materials, 2019, 282, 159-168.	2.2	5
33	When a Redâ€“NIRâ€Emissive Cs 2 [Mo 6 Br 14] Interacts with an Active Diureasilâ€“PEO Matrix: Design of Tunable and Whiteâ€Lightâ€Emitting Hybrid Material. Chemistry - A European Journal, 2019, 25, 15248-15251.	1.7	10
34	Evaluation of H2O2 electrogeneration and decolorization of Orange II azo dye using tungsten oxide nanoparticle-modified carbon. Applied Catalysis B: Environmental, 2018, 232, 436-445.	10.8	98
35	Niobium: a promising Pd co-electrocatalyst for ethanol electrooxidation reactions. Journal of Solid State Electrochemistry, 2018, 22, 1495-1506.	1.2	22
36	Structure and properties of epoxy-siloxane-silica nanocomposite coatings for corrosion protection. Journal of Colloid and Interface Science, 2018, 513, 617-628.	5.0	51

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37	Surface modification of ZnO quantum dots by organosilanes and oleic acid with enhanced luminescence for potential biological application. Materials Research Express, 2017, 4, 015027.	0.8	17
38	W@Au Nanostructures Modifying Carbon as Materials for Hydrogen Peroxide Electrogeneration. Electrochimica Acta, 2017, 231, 713-720.	2.6	36
39	Synthesis and Characterization of ZrO2/C as Electrocatalyst for Oxygen Reduction to H2O2. Electrocatalysis, 2017, 8, 189-195.	1.5	25
40	Carbon Modified with Vanadium Nanoparticles for Hydrogen Peroxide Electrogeneration. Electrocatalysis, 2017, 8, 311-320.	1.5	9
41	On the supercapacitor performance of microwave heat treated self organized TiO2 nanotubes: influence of the cathodic pre-treatment, water aging, and thermal oxide. Electrochimica Acta, 2017, 245, 165-172.	2.6	6
42	Iridiumâ˜Rhodium Nanoparticles for Ammonia Oxidation: Electrochemical and Fuel Cell Studies. ChemElectroChem, 2017, 4, 1101-1107.	1.7	27
43	High-performance activated carbon from polyaniline for capacitive deionization. Carbon, 2017, 123, 318-333.	5.4	97
44	Protective Coatings Based on PMMAâ€“Silica Nanocomposites Reinforced with Carbon Nanotubes. , 2016, , .		3
45	Bifunctional silica nanoparticles for the exploration of Pseudomonas aeruginosa biofilm. , 2016, , .		0
46	Hydrogen peroxide electrogeneration in gas diffusion electrode nanostructured with Ta2O5. Applied Catalysis A: General, 2016, 517, 161-167.	2.2	90
47	Assessments of the Effect of Increasingly Severe Cathodic Pretreatments on the Electrochemical Activity of Polycrystalline Boron-Doped Diamond Electrodes. Analytical Chemistry, 2016, 88, 5363-5368.	3.2	57
48	A Comparative Study on Graphene Oxide and Carbon Nanotube Reinforcement of PMMA-Siloxane-Silica Anticorrosive Coatings. ACS Applied Materials & Interfaces, 2016, 8, 16339-16350.	4.0	64
49	Surface and Catalytical effects on Treated Carbon Materials for Hydrogen Peroxide Electrogeneration. Electrocatalysis, 2016, 7, 60-69.	1.5	50
50	Sulfated zirconia foams synthesized by integrative route combining surfactants, air bubbles and solâ€“gel transition applied to heterogeneous catalysis. RSC Advances, 2016, 6, 6686-6694.	1.7	14
51	Degradation of organic compounds in a fenton system based on chitosan/Fe0/Fe2O3 composites: a theoretical and experimental study. Journal of the Iranian Chemical Society, 2016, 13, 377-386.	1.2	3
52	Oxidation of ammonia using PtRh/C electrocatalysts: Fuel cell and electrochemical evaluation. Applied Catalysis B: Environmental, 2015, 174-175, 136-144.	10.8	85
53	Siloxaneâ€“PMMA hybrid anti-corrosion coatings reinforced by lignin. Surface and Coatings Technology, 2015, 275, 9-16.	2.2	49
54	On the structure of high performance anticorrosive PMMAâ€“siloxaneâ€“silica hybrid coatings. RSC Advances, 2015, 5, 106754-106763.	1.7	68

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55	Structural properties of cerium doped siloxaneâ€“PMMA hybrid coatings with high anticorrosive performance. RSC Advances, 2015, 5, 15414-15424.	1.7	42
56	Structural and optical features of ureasiloxaneâ€“polyethylene oxide hybrids containing CeO2 nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 471, 73-80.	2.3	9
57	Carbon-supported TiO2â€“Au hybrids as catalysts for the electrogeneration of hydrogen peroxide: Investigating the effect of TiO2 shape. Journal of Catalysis, 2015, 326, 100-106.	3.1	45
58	As-synthesized TEA-BEA zeolite: Effect of Si/Al ratio on the Knoevenagel condensation. Microporous and Mesoporous Materials, 2015, 202, 198-207.	2.2	36
59	Structure and properties of chemically synthesized BiFeO3. Influence of fuel and complexing agent. Ceramics International, 2015, 41, 69-77.	2.3	23
60	Improvement of the photocatalytic activity of magnetite by Mn-incorporation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 181, 64-69.	1.7	19
61	Structure and catalytic properties of sulfated zirconia foams. Journal of Sol-Gel Science and Technology, 2014, 72, 252-259.	1.1	6
62	Sodium titanate as basic catalyst in transesterification reactions. Fuel, 2014, 118, 48-54.	3.4	26
63	Characterization of metalâ€“biomass interactions in the lanthanum(III) biosorption on Sargassum sp. using SEM/EDX, FTIR, and XPS: Preliminary studies. Chemical Engineering Journal, 2014, 239, 381-391.	6.6	136
64	Bifunctional silica nanoparticles for the exploration of biofilms ofPseudomonas aeruginosa. Biofouling, 2013, 29, 775-788.	0.8	14
65	TiO2â€“Cu photocatalysts: a study on the long- and short-range chemical environment of the dopant. Journal of Materials Science, 2013, 48, 3904-3912.	1.7	24
66	Influence of the preparation method and the support on H2O2 electrogeneration using cerium oxide nanoparticles. Electrochimica Acta, 2013, 111, 339-343.	2.6	42
67	Degradation of dipyrone via advanced oxidation processes using a cerium nanostructured electrocatalyst material. Applied Catalysis A: General, 2013, 462-463, 256-261.	2.2	36
68	Ethanol electro-oxidation in an alkaline medium using Pd/C, Au/C and PdAu/C electrocatalysts prepared by electron beam irradiation. Electrochimica Acta, 2013, 111, 455-465.	2.6	125
69	Low tungsten content of nanostructured material supported on carbon for the degradation of phenol. Applied Catalysis B: Environmental, 2013, 142-143, 479-486.	10.8	61
70	Carbon nanotube-reinforced siloxane-PMMA hybrid coatings with high corrosion resistance. Progress in Organic Coatings, 2013, 76, 601-608.	1.9	59
71	Gas phase photocatalytic bacteria inactivation using metal modified TiO2 catalysts. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 253, 38-44.	2.0	13
72	Are new TiNbZr alloys potential substitutes of the Ti6Al4V alloy for dental applications? An electrochemical corrosion study. Biomedical Materials (Bristol), 2013, 8, 065005.	1.7	26

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73	Highly corrosion resistant siloxane-polymethyl methacrylate hybrid coatings. Journal of Sol-Gel Science and Technology, 2012, 63, 266-274.	1.1	57
74	The valuable role of renucleation rate in ultrananocrystalline diamond growth. Diamond and Related Materials, 2012, 23, 112-119.	1.8	21
75	APTES-Modified RE₂O₃:Eu³⁺ Luminescent Beads: Structure and Properties. Langmuir, 2012, 28, 3962-3971.	1.6	31
76	PtSnIr/C anode electrocatalysts: promoting effect in direct ethanol fuel cells. Journal of the Brazilian Chemical Society, 2012, 23, 1146-1153.	0.6	20
77	Spectroscopic characterization of the reduction and removal of chromium (VI) by tropical peat and humin. Fuel, 2012, 91, 141-146.	3.4	19
78	Black and green pigments based on chromiumâ€“cobalt spinels. Materials Chemistry and Physics, 2011, 129, 619-624.	2.0	48
79	The influence of hydrogen plasma pre-treatment on the structure of BDND electrode surface applied for phenol detection. Journal of Nanoparticle Research, 2011, 13, 6133-6139.	0.8	17
80	Electrochemical Behavior of a Glassy Carbon Electrode Chemically Modified with Nickel Pentacyanonitrosylferrate in Presence of Sulfur Compounds. Electroanalysis, 2011, 23, 1488-1496.	1.5	3
81	A comparative study of the electrogeneration of hydrogen peroxide using Vulcan and Printex carbon supports. Carbon, 2011, 49, 2842-2851.	5.4	161
82	Efficiency of ethanol conversion induced by controlled modification of pore structure and acidic properties of alumina catalysts. Applied Catalysis A: General, 2011, 398, 59-65.	2.2	28
83	Corrosion protection of stainless steel by polysiloxane hybrid coatings prepared using the solâ€“gel process. Surface and Coatings Technology, 2010, 204, 2689-2701.	2.2	129
84	Removal of metal ions from aqueous solution by chelating polymeric hydrogel. Environmental Chemistry Letters, 2010, 8, 343-348.	8.3	17
85	Preparation of different basic Siâ€“MCM-41 catalysts and application in the Knoevenagel and Claisenâ€“Schmidt condensation reactions. Journal of Catalysis, 2010, 271, 220-227.	3.1	69
86	Controlled growth of anodic aluminium oxide films with hexagonal array of nanometer-sized pores filled with textured copper nanowires. Journal of the European Ceramic Society, 2010, 30, 181-186.	2.8	8
87	Photocatalytic degradation of methylene blue by TiO2â€“Cu thin films: Theoretical and experimental study. Journal of Hazardous Materials, 2010, 184, 273-280.	6.5	92
88	Improvement of the corrosion resistance of polysiloxane hybrid coatings by cerium doping. Journal of Non-Crystalline Solids, 2010, 356, 2606-2612.	1.5	51
89	XPS study on water corrosion of fluorzirconate glasses and their protection by a layer of surface modified tin dioxide nanoparticles. Journal of Electron Spectroscopy and Related Phenomena, 2007, 156-158, 128-134.	0.8	9
90	Improvement of the chemical resistance of zirconium fluoride glasses coated with a TironÂ® modified tin oxide layer prepared by the solâ€“gel process. Journal of Non-Crystalline Solids, 2006, 352, 3653-3658.	1.5	0

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91	Structure and properties of Ti4+-ureasil organic-inorganic hybrids. Journal of the Brazilian Chemical Society, 2006, 17, 443-452.	0.6	19
92	Corrosion protection of fluorzirconate glasses coated by a layer of surface modified tin oxide nanoparticles. Thin Solid Films, 2006, 502, 94-98.	0.8	1
93	Density improvement of the solâ€“gel dip-coated SnO2 films by chemical surface modification. Journal of the European Ceramic Society, 2005, 25, 2045-2049.	2.8	10
94	Photo-induced effects in Ge25Ga10S65 glasses studied by XPS and XAS. Solid State Ionics, 2005, 176, 1403-1409.	1.3	11
95	XPS Study of the Corrosion Protection of Fluorozirconate Glasses Dip-Coated with SnO2 Transparent Thin Films. Journal of Sol-Gel Science and Technology, 2004, 32, 155-160.	1.1	21
96	Transparent and conductive ZnO:Al thin films prepared by sol-gel dip-coating. Journal of the European Ceramic Society, 2004, 24, 1009-1013.	2.8	126
97	Study on the initial stages of water corrosion of fluorozirconate glasses. Journal of Non-Crystalline Solids, 2004, 348, 38-43.	1.5	10
98	Nanostructure and properties of ZnO films produced by the pyrosol process. Journal of Applied Crystallography, 2003, 36, 435-438.	1.9	7
99	Pressure-induced physical changes of noble gases implanted in highly stressed amorphous carbon films. Physical Review B, 2003, 68, .	1.1	34
100	Incorporation of nitrogen in carbon nanotubes. Journal of Non-Crystalline Solids, 2002, 299-302, 874-879.	1.5	92
101	EXAFS study of noble gases implanted in highly stressed amorphous carbon films. Journal of Non-Crystalline Solids, 2002, 299-302, 805-809.	1.5	8
102	Structural properties of hydrogenated carbon-nitride films produced by ion-beam-assisted evaporation of the molecular precursor C4N6H4. Journal of Applied Physics, 2001, 89, 7852-7859.	1.1	2
103	Influence of chemical sputtering on the composition and bonding structure of carbon nitride films. Thin Solid Films, 2001, 398-399, 116-123.	0.8	47
104	Influence of stress on the electron core level energies of noble gases implanted in hard amorphous carbon films. Diamond and Related Materials, 2001, 10, 956-959.	1.8	5
105	A comprehensive nitriding study by low energy ion beam implantation on stainless steel. Surface and Coatings Technology, 2001, 146-147, 405-409.	2.2	17
106	Hard graphitic-like amorphous carbon films with high stress and local microscopic density. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 971-975.	0.9	47
107	Vibrational analysis of amorphous carbon-nitrogen alloys by15Nand D isotopic substitution. Physical Review B, 2000, 61, 1083-1087.	1.1	42
108	Effects of increasing nitrogen concentration on the structure of carbon nitride films deposited by ion beam assisted deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2277.	0.9	51

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109	Photoelectron spectroscopic study of amorphous GaAsN films. Applied Physics Letters, 2000, 76, 2211-2213.	1.5	10
110	On the structure of argon assisted amorphous carbon films. Diamond and Related Materials, 2000, 9, 796-800.	1.8	33
111	Comparative study on the bonding structure of hydrogenated and hydrogen free carbon nitride films with high N content. Diamond and Related Materials, 2000, 9, 577-581.	1.8	68
112	Hydrogen induced changes on the electronic structure of carbon nitride films. Journal of Non-Crystalline Solids, 1998, 227-230, 645-649.	1.5	26
113	Electronic structure of hydrogenated carbon nitride films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 2941-2949.	0.9	162
114	Identification of structural changes in carbonâ€“nitrogen alloys by studying the dependence of the plasmon energy on nitrogen concentration. Applied Physics Letters, 1998, 73, 3521-3523.	1.5	24
115	Infrared analysis of deuterated carbonâ€“nitrogen films obtained by dual-ion-beam-assisted-deposition. Applied Physics Letters, 1998, 73, 1065-1067.	1.5	58
116	Synthesis of carbon nitride films at low temperatures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 107-112.	0.9	95
117	Low-temperature sputter deposition and characterisation of carbon nitride films. Surface and Coatings Technology, 1997, 97, 544-551.	2.2	20
118	Chemical sputtering of carbon films by low energy N2+ ion bombardment. Diamond and Related Materials, 1996, 5, 1152-1158.	1.8	83
119	Ion beam deposited carbon nitride films: characterization and identification of chemical sputtering. Thin Solid Films, 1996, 290-291, 107-111.	0.8	89
120	Nanostructured titanium boron nitride coatings of very high hardness. Surface and Coatings Technology, 1995, 74-75, 491-496.	2.2	48
121	Electrical conductivity of amorphous hydrogenated carbon. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 72, 335-350.	0.6	64
122	Titanium boron nitride coatings of very high hardness. Surface and Coatings Technology, 1994, 68-69, 194-198.	2.2	74
123	Ambiguous doping effects in amorphous hydrogenated carbon films prepared by PACVD. Diamond and Related Materials, 1994, 3, 1103-1106.	1.8	11
124	Hardness and elasticity of diamond-like carbon films prepared by ion-beam assisted sputter deposition. Diamond and Related Materials, 1994, 3, 770-774.	1.8	11
125	Electrical and optical properties of plasma-deposited amorphous hydrocarbon films. Journal of Non-Crystalline Solids, 1991, 137-138, 843-846.	1.5	12
126	Electrical characterization of plasma-deposited hydrogenated amorphous carbon films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 139, 334-388.	2.6	7

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127	Corrosion Behavior of Fe-Mn-Si-Cr-Ni-Co Shape Memory Stainless Steel in Highly Oxidizing Medium. Materials Science Forum, 0, 869, 669-674.	0.3	2
128	Organic-Inorganic Hybrid Coatings for Corrosion Protection of Metallic Surfaces. , 0, , .		8
129	Organic-Inorganic Hybrid Coatings for Active and Passive Corrosion Protection. , 0, , .		0