Chuanzhong Chen

List of Publications by Year
in descending order

122	4,252	159585 30	123424 61
papers	citations	h-index	g-index

122	122	122	3249
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure and mechanical behavior of the laser synthesized composites modified by micro/nano scale rare earth oxides. Journal of Alloys and Compounds, 2022, 895, 162641.	5.5	6
2	In situ formed TiB2/TiC complex structure in laser-alloyed coatings with improved wear property. Ceramics International, 2022, 48, 7056-7062.	4.8	13
3	Research status of laser cladding material system on titanium alloy. Journal of Physics: Conference Series, 2022, 2256, 012021.	0.4	0
4	The Application of Freeze-casting Method for Fabrication of Calcium Phosphate Biomaterials. , 2022, , .		0
5	The Application of 3D Printing Technology in Fabrication of Calcium Phosphate-based Biomaterials for Bone Repairment. , 2022, , .		0
6	Catalytic FeP decorated carbon black as a multifunctional conducting additive for high-performance lithium-sulfur batteries. Carbon, 2021, 172, 96-105.	10.3	60
7	P-doped CoSe2 nanoparticles embedded in 3D honeycomb-like carbon network for long cycle-life Na-ion batteries. Journal of Materials Science and Technology, 2021, 77, 100-107.	10.7	32
8	Ag-containing antibacterial self-healing micro-arc oxidation coatings on Mgâ€“Znâ€“Sr alloys. Surface Engineering, 2021, 37, 926-941.	2.2	19
9	Bioactive MAO/CS composite coatings on Mg-Zn-Ca alloy for orthopedic applications. Progress in Organic Coatings, 2021, 152, 106112.	3.9	13
10	High-content Co-Nx sites on carbon nanotubes for effective sulfur catalysis in lithiumâ€“sulfur batteries. Applied Surface Science, 2021, 541, 148632.	6.1	15
11	Se-doped CoP nanoparticles confined in 3D porous carbon frameworks with enlarged interlayer spacings boost potassium-ion storage. Applied Surface Science, 2021, 543, 148867.	6.1	17
12	Laser alloying with Feâ€“B₄Câ€“Ti on AA6061 for improved wear resistance. Surface Engineering, 2021, 37, 1503-1513.	2.2	3
13	Influence of Surface Post-Processing on Crystal Refinement and Characteristics of Hopeite Coating by Phosphating. Coatings, 2021, 11, 541.	2.6	3
14	Carbon nanotubes modified by Co3O4 nanoparticles as efficient sulfur host for high-performance lithiumâ€“sulfur batteries. Journal of Materials Science: Materials in Electronics, 2021, 32, 17716-17725.	2.2	2
15	Ultrasonic Induced Refinement of Induction Heated Oxide Coating on Titanium. Coatings, 2021, 11, 812.	2.6	0
16	Dendriteâ€Free Li Metal Anodes and the Formation of Plating Textures with a High Transference Number Modified Separator. Small, 2021, 17, e2101881.	10.0	10
17	In-situ TiB2-TiC reinforced Fe-Al composite coating on 6061 aluminum alloy by laser surface modification. Journal of Materials Processing Technology, 2021, 294, 117107.	6.3	24
18	Enhanced corrosion resistance of magnesium alloy by plasma electrolytic oxidation plus hydrothermal treatment. Surface and Coatings Technology, 2021, 424, 127662.	4.8	22

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19	Research status of laser additive manufacturing for metal: a review. Journal of Materials Research and Technology, 2021, 15, 855-884.	5.8	110
20	Laser Cladding Induced Spherical Graphitic Phases by Super-Assembly of Graphene-Like Microstructures and the Antifriction Behavior. ACS Central Science, 2021, 7, 318-326.	11.3	8
21	Layer by layer assembled chitosan (TiO2)-heparin composite coatings on MAO-coated Mg alloys. Materials Letters, 2020, 281, 128640.	2.6	11
22	The Reliability Design of Switch Chip Based on THENA Process Stimulation System. Journal of Physics: Conference Series, 2020, 1650, 032107.	0.4	0
23	Influence of temperature on the soldering process of CLCC-3 package components using AuSn20 solder. AIP Advances, 2020, 10, 055105.	1.3	0
24	Improving the corrosion resistance of micro-arc oxidation coated Mgâ€“Znâ€“Ca alloy. RSC Advances, 2020, 10, 8244-8254.	3.6	14
25	Effect of Temperature on the Chip Soldering Process with AuGa0.03 Alloy Solder. Crystals, 2020, 10, 59.	2.2	2
26	WEAR PROPERTIES AND CHARACTERIZATION OF LASER-DEPOSITED NI-BASE COMPOSITES ON 304 STAINLESS STEEL. Surface Review and Letters, 2020, 27, 1950219.	1.1	1
27	The effect of Nb and Si on the hot corrosion behaviors of TiAl coatings on a Ti-6Al-4V alloy. Corrosion Science, 2020, 168, 108578.	6.6	26
28	Preparation and microstructure of MAO/CS composite coatings on Mg alloy. Materials Letters, 2020, 271, 127729.	2.6	19
29	Controlled sulfidation towards achieving core-shell 1D-NiMoO4 @ 2D-NiMoS4 architecture for high-performance asymmetric supercapacitor. Journal of Alloys and Compounds, 2019, 804, 27-34.	5.5	39
30	Mixed-valent MnSiO3/C nanocomposite for high-performance asymmetric supercapacitor. Journal of Colloid and Interface Science, 2019, 556, 239-248.	9.4	21
31	Preparation and characterization of composite coating on Mg-1.74Zn-0.55Ca alloy by micro-arc oxidation combined with sol-gel method. Materials Letters, 2019, 255, 126578.	2.6	21
32	Degradable magnesium-based alloys for biomedical applications: The role of critical alloying elements. Journal of Biomaterials Applications, 2019, 33, 1348-1372.	2.4	61
33	Corrosion behaviour of micro-arc oxidation coatings on Mgâ€“2Sr prepared in poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	3.6	5
34	Biological properties of calcium phosphate biomaterials for bone repair: a review. RSC Advances, 2018, 8, 2015-2033.	3.6	134
35	Chitosan composite scaffolds for articular cartilage defect repair: a review. RSC Advances, 2018, 8, 3736-3749.	3.6	62
36	Effect of calcium on the microstructure and corrosion behavior of microarc oxidized Mg-xCa alloys. Biointerphases, 2018, 13, 011003.	1.6	10

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37	Bioactivity of hydroxyapatite/wollastonite composite films deposited by pulsed laser. Ceramics International, 2018, 44, 10204-10209.	4.8	14
38	Microstructure and high-temperature oxidation resistance of Ti-Al-Nb coatings on a Ti-6Al-4V alloy fabricated by laser surface alloying. Surface and Coatings Technology, 2018, 344, 479-488.	4.8	53
39	Laser surface alloying on aluminum and its alloys: A review. Optics and Lasers in Engineering, 2018, 100, 23-37.	3.8	125
40	Formation of silicon-calcium-phosphate-containing coating on Mg-Zn-Ca alloy by a two-step micro-arc oxidation technique. Materials Letters, 2018, 212, 37-40.	2.6	20
41	Effect of the second-step voltages on the structural and corrosion properties of siliconâ€“calciumâ€“phosphate (Siâ€“CaP) coatings on Mgâ€“Znâ€“Ca alloy. Royal Society Open Science, 2018, 5, 172410.	2.4	14
42	Microstructure and high temperature oxidation behavior of Ti-Al-Nb-Si coatings on Ti-6Al-4V alloy. Journal of Alloys and Compounds, 2018, 765, 46-57.	5.5	34
43	Influence of silicon on growth mechanism of micro-arc oxidation coating on cast Alâ€“Si alloy. Royal Society Open Science, 2018, 5, 172428.	2.4	18
44	Microstructure and wear resistance of composite coating by laser cladding Ni60A/B4C pre-placed powders on Ti-6Al-4V substrate. Science and Engineering of Composite Materials, 2017, 24, 541-546.	1.4	10
45	Microstructure and wear property of the Ti 5 Si 3 /TiC reinforced Co-based coatings fabricated by laser cladding on Ti-6Al-4V. Optics and Laser Technology, 2017, 92, 156-162.	4.6	89
46	Research and development status of laser cladding on magnesium alloys: A review. Optics and Lasers in Engineering, 2017, 93, 195-210.	3.8	215
47	Effects of calcium salts on microstructure and corrosion behavior of micro-arc oxidation coatings on Mg-2Zn-1Ca-0.8 Mn alloy. Materials Letters, 2017, 196, 42-45.	2.6	27
48	Research status of magnesium alloys by micro-arc oxidation: a review. Surface Engineering, 2017, 33, 731-738.	2.2	70
49	Preparation and characterization of a calciumâ€“phosphateâ€“silicon coating on a Mgâ€“Znâ€“Ca alloy via two-step micro-arc oxidation. Physical Chemistry Chemical Physics, 2017, 19, 15110-15119.	2.8	22
50	Effects of sintering temperature on the properties of alumina/hydroxyapatite composites. Journal of Sol-Gel Science and Technology, 2017, 84, 23-27.	2.4	13
51	Microstructure and properties of Ti-Al coating and Ti-Al-Si system coatings on Ti-6Al-4V fabricated by laser surface alloying. Surface and Coatings Technology, 2017, 309, 805-813.	4.8	68
52	Effect of process parameters on the microstructure evolution and wear property of the laser cladding coatings on Ti-6Al-4V alloy. Journal of Alloys and Compounds, 2017, 692, 989-996.	5.5	131
53	Effect of phosphate additives on the microstructure, bioactivity, and degradability of microarc oxidation coatings on Mg-Zn-Ca-Mn alloy. Biointerphases, 2016, 11, 031006.	1.6	7
54	MECHANICAL PROPERTIES AND HIGH TEMPERATURE OXIDATION BEHAVIOR OF Tiâ€“Al COATING REINFORCED BY NITRIDES ON Tiâ€“6Alâ€“4V ALLOY. Surface Review and Letters, 2016, 23, 1650031.	1.1	2

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55	Characterization and biodegradation behavior ofÂmicro-arc oxidation coatings formed on Mgâ€“Znâ€“Ca alloys in two different electrolytes. RSC Advances, 2016, 6, 104808-104818.	3.6	10
56	High temperature oxidation behavior and research status of modifications on improving high temperature oxidation resistance of titanium alloys and titanium aluminides: A review. Journal of Alloys and Compounds, 2016, 685, 784-798.	5.5	366
57	Microstructure and property of composite coatings on titanium alloy deposited by laser cladding with Co42+TiN mixed powders. Journal of Alloys and Compounds, 2016, 686, 74-81.	5.5	57
58	Formation of calcium phosphate coating on Mg-Zn-Ca alloy by micro-arc oxidation technique. Materials Letters, 2016, 164, 575-578.	2.6	20
59	Fabrication of Co-Based Coatings on Titanium Alloy by Laser Cladding with CeO₂ Addition. Materials and Manufacturing Processes, 2016, 31, 1461-1467.	4.7	30
60	Preparation of Si-containing oxide coating and biomimetic apatite induction on magnesium alloy. Applied Surface Science, 2016, 388, 148-154.	6.1	15
61	Effect of Na2WO4 on Growth Process and Corrosion Resistance of Micro-arc Oxidation Coatings on 2A12 Aluminum Alloys in CH3COONa Electrolyte. Journal of Materials Engineering and Performance, 2016, 25, 297-303.	2.5	13
62	Structure and in vitro bioactivity of ceramic coatings on magnesium alloys by microarc oxidation. Applied Surface Science, 2016, 388, 114-119.	6.1	39
63	High-temperature oxidation behavior of Ni-based superalloys with Nb and Y and the interface characteristics of oxidation scales. Surface and Interface Analysis, 2015, 47, 362-370.	1.8	33
64	Review of the biocompatibility of micro-arc oxidation coated titanium alloys. Materials and Design, 2015, 85, 640-652.	7.0	271
65	Influence of Nb and Y on Hot Corrosion Behavior of Niâ€“Cr-based Superalloys. Materials and Manufacturing Processes, 2015, 30, 677-684.	4.7	15
66	Microstructures and wear properties of laser cladding Co-based composite coatings on Tiâ€“6Alâ€“4V. Materials & Design, 2015, 80, 174-181.	5.1	114
67	Microstructures and properties of TiN reinforced Co-based composite coatings modified with Y2O3 by laser cladding on Tiâ€“6Alâ€“4V alloy. Journal of Alloys and Compounds, 2015, 650, 178-184.	5.5	98
68	Fabrication of Ni-Based Superalloys Containing Nb and Their High Temperature Oxidation Behaviors. Materials and Manufacturing Processes, 2015, 30, 1364-1369.	4.7	16
69	In vitro degradation and electrochemical corrosion evaluations of microarc oxidized pure Mg, Mgâ€“Ca and Mgâ€“Caâ€“Zn alloys for biomedical applications. Materials Science and Engineering C, 2015, 47, 85-96.	7.3	67
70	Effect of current density on the microstructure and corrosion resistance of microarc oxidized ZK60 magnesium alloy. Biointerphases, 2014, 9, 031009.	1.6	7
71	Dissolution and precipitation behaviors of silicon-containing ceramic coating on Mgâ€“Znâ€“Ca alloy in simulated body fluid. Colloids and Surfaces B: Biointerfaces, 2014, 122, 746-751.	5.0	28
72	The influence of Nb on hot corrosion behavior of Ni-based superalloy at 800 Â°C in a mixture of Na₂SO₄â€“NaCl. Journal of Materials Research, 2014, 29, 2596-2603.	2.6	17

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73	Research status of laser cladding on titanium and its alloys: A review. Materials & Design, 2014, 58, 412-425.	5.1	451
74	Influence of Al2O3â€“Y2O3 and Ceâ€“Alâ€“Ni amorphous alloy on physical properties of laser synthetic composite coatings on titanium alloys. Surface and Coatings Technology, 2014, 247, 55-60.	4.8	13
75	Physical Properties and Formation Mechanism of Copper/Glass Modified Laser Nanocrystals-Amorphous Reinforced Coatings. Journal of Physical Chemistry C, 2013, 117, 4568-4573.	3.1	19
76	Microstructure characteristics of laser alloying composite coatings in nitrogen protective atmosphere. Science and Engineering of Composite Materials, 2013, .	1.4	1
77	MICRO-STRUCTURES OF HARD COATINGS DEPOSITED ON TITANIUM ALLOYS BY LASER ALLOYING TECHNIQUE. Surface Review and Letters, 2013, 20, 1350007.	1.1	6
78	Effect of <scp><scp>ZrO₂</scp></scp> (<scp>YPSZ</scp>) on Microstructure Characteristic and Wear Resistance of the <scp><scp>Ti₃Al/TiC</scp></scp> Laserâ€Cladded Ceramic Layer on Titanium Alloy. International Journal of Applied Ceramic Technology, 2012, 9, 947-952.	2.1	7
79	Effect of SiC/nanoâ€CeO₂ on wear resistance and microstructures of Ti₃Al/Î³â€Ni matrix laserâ€cladded composite coating on Tiâ€“6Alâ€“4V alloy. Surface and Interface Analysis, 2012, 44, 559-564.	1.8	11
80	Surface modification of titanium alloy with laser cladding RE oxides reinforced Ti3Alâ€“matrix composites. Composites Part B: Engineering, 2012, 43, 1207-1212.	12.0	45
81	Microstructures and wear properties of YPSZ/CeO2 reinforced composites deposited by laser cladding. Composites Part B: Engineering, 2012, 43, 896-901.	12.0	26
82	Influence of Cu on microstructure and wear resistance of TiC/TiB/TiN reinforced composite coating fabricated by laser cladding. Materials Chemistry and Physics, 2012, 133, 741-745.	4.0	52
83	Phase constituents and microstructure of laser cladding Al2O3/Ti3Al reinforced ceramic layer on titanium alloy. Journal of Alloys and Compounds, 2011, 509, 4882-4886.	5.5	44
84	PHASE CONSTITUENTS AND MICROSTRUCTURE OF Ti₃Al/Fe₃Al + TiN/TiB₂ COMPOSITE COATING ON TITANIUM ALLOY. Surface Review and Letters, 2011, 18, 103-108.	1.1	13
85	A study on wear resistance and microcrack of the Ti3Al/TiAl + TiC ceramic layer deposited by laser cladding on Tiâ€“6Alâ€“4V alloy. Applied Surface Science, 2010, 257, 1550-1555.	6.1	90
86	Effects of the substrate temperature on the bioglass films deposited by pulsed laser. Applied Surface Science, 2008, 254, 6897-6901.	6.1	12
87	The influences of target properties and deposition times on pulsed laser deposited hydroxyapatite films. Applied Surface Science, 2008, 255, 619-621.	6.1	4
88	Hydroxyapatite coating on Ti6Al4V alloy by a solâ€“gel method. Journal of Materials Science: Materials in Medicine, 2008, 19, 2281-2286.	3.6	45
89	Characterization of Hydroxyapatite Films Prepared by Pulsed Laser Deposition. Crystal Growth and Design, 2008, 8, 219-223.	3.0	13
90	The role of the pressure in pulsed laser deposition of bioactive glass films. Journal of Non-Crystalline Solids, 2008, 354, 4000-4004.	3.1	23

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91	INFLUENCE OF THE TECHNICAL PARAMETERS ON BIOACTIVE FILMS DEPOSITED BY PULSED LASER. Surface Review and Letters, 2007, 14, 283-291.	1.1	4
92	SURFACE BEHAVIOR OF BIOACTIVE GLASS OF Siâ€“Naâ€“Caâ€“P SYSTEM IN SIMULATED BODY FLUID. Surface Review and Letters, 2007, 14, 49-55.	1.1	1
93	Microstructure of yttric calcium phosphate bioceramic coatings synthesized by laser cladding. Applied Surface Science, 2007, 253, 4016-4020.	6.1	39
94	Effects of solâ€“gel processing parameters on the phases and microstructures of HA films. Colloids and Surfaces B: Biointerfaces, 2007, 57, 237-242.	5.0	19
95	Fabrication and characterization of hydroxyapatite microspheres obtained by ultrasonic atomization method. Frontiers of Materials Science in China, 2007, 1, 210-214.	0.5	0
96	APPLICATIONS OF ELECTROPHORETIC DEPOSITION IN THE COATING AND POROUS MATERIALS FABRICATIONS. Surface Review and Letters, 2006, 13, 103-109.	1.1	3
97	DEVELOPMENT OF HYDROXYAPATITE COATING PREPARED BY SOLâ€“GEL TECHNIQUE. Surface Review and Letters, 2006, 13, 737-745.	1.1	3
98	Pulsed laser deposition of hydroxyapatite thin films under Ar atmosphere. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 429, 25-29.	5.6	15
99	Effects of technological parameters on the microstructure of laser remelted hydroxyapatite (HA) coatings. Journal Physics D: Applied Physics, 2006, 39, 1169-1173.	2.8	4
100	STRUCTURE AND ELEMENT DISTRIBUTION OF Al2O3 COATING ON ZL109 ALLOY BY PLASMA ELECTROLYSIS OXIDATION. Surface Review and Letters, 2006, 13, 503-507.	1.1	1
101	EFFECTS OF TECHNICAL PARAMETERS ON THE PULSED LASER DEPOSITED FERROELECTRIC FILMS. Surface Review and Letters, 2006, 13, 687-695.	1.1	1
102	RESEARCH STATUS ABOUT SURFACE MODIFICATION OF BIOMEDICAL Ti AND ITS ALLOYS BY MICRO-ARC OXIDATION. Surface Review and Letters, 2006, 13, 35-43.	1.1	23
103	CHARACTERIZATION OF ISOTHERMAL OXIDATION OF AIR PLASMA SPRAYED NiCrAlY COATINGS. Surface Review and Letters, 2006, 13, 551-555.	1.1	1
104	MICROSTRUCTURE AND ELEMENT DISTRIBUTIONS OF CERAMIC-LIKE COATINGS ON THE AZ91 ALLOY BY MICRO-ARC OXIDATION. Surface Review and Letters, 2006, 13, 63-68.	1.1	8
105	HYDROXYAPATITE THIN FILMS ON TITANIUM DEPOSITED BY KrF LASER. Surface Review and Letters, 2006, 13, 451-455.	1.1	1
106	MICROSTRUCTURE OF PLASMA-SPRAYED Al2O3â€“ZrO2 COMPOSITE COATINGS. Surface Review and Letters, 2006, 13, 545-549.	1.1	1
107	BONDING ZONE MORPHOLOGIES CHARACTERISTICS OF LASER REMELTED HA COATINGS. Surface Review and Letters, 2006, 13, 655-660.	1.1	0
108	DEVELOPMENT OF LASER CLADDING WEAR-RESISTANT COATING ON TITANIUM ALLOYS. Surface Review and Letters, 2006, 13, 645-654.	1.1	8

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109	CHARACTERIZATION OF SOME METHODS OF PREPARATION FOR BIOACTIVE GLASS COATING ON IMPLANTS. Surface Review and Letters, 2006, 13, 93-102.	1.1	6
110	THE EFFECT OF RARE EARTH ON THE STRUCTURE AND PERFORMANCE OF LASER CLAD COATINGS. Surface Review and Letters, 2006, 13, 509-517.	1.1	23
111	Influence of laser remelting on the microstructure and phases constitution of plasma sprayed hydroxyapatite coatings. Applied Surface Science, 2005, 250, 98-103.	6.1	22
112	Pulsed laser deposition and its current research status in preparing hydroxyapatite thin films. Applied Surface Science, 2005, 252, 1538-1544.	6.1	101
113	THE CURRENT TECHNIQUES FOR PREPARING BIOGLASS COATINGS. Surface Review and Letters, 2005, 12, 505-513.	1.1	17
114	THE APPLICATION OF PULSED LASER DEPOSITION IN PRODUCING BIOACTIVE CERAMIC FILMS. Surface Review and Letters, 2005, 12, 401-408.	1.1	8
115	DEVELOPMENT OF PREPARATION OF THE FUNCTIONAL THIN FILMS BY PULSED LASER DEPOSITION. Surface Review and Letters, 2005, 12, 597-604.	1.1	3
116	THE TARGET MORPHOLOGY DURING PULSED LASER DEPOSITION OF HYDROXYAPATITE THIN FILMS. Surface Review and Letters, 2005, 12, 539-543.	1.1	3
117	MICROSTRUCTURE AND GROWTH PROCESS OF Al2O3 FILM ON PURE ALUMINUM BY MICRO-ARC OXIDATION. Surface Review and Letters, 2005, 12, 781-785.	1.1	7
118	PREPARATION AND MICROSTRUCTURE OF THIN TiO2 FILMS CONTAINING Ca AND P USING MICRO-ARC OXIDATION. Surface Review and Letters, 2005, 12, 555-559.	1.1	1
119	SOLIDIFICATION MECHANISM OF LASER REMELTED BIOACTIVE HA COATINGS. Surface Review and Letters, 2005, 12, 819-823.	1.1	1
120	ADVANCEMENT IN PREPARATION OF HYDROXYAPATITE/BIOGLASS GRADED COATINGS BY ELECTROPHORETIC DEPOSITION. Surface Review and Letters, 2005, 12, 773-779.	1.1	7
121	Laser surface remelting and resolidifying process of Znâ€“27 wt.% Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 323, 103-109.	5.6	4
122	Comparison of laser-clad and furnace-melted Ni-based alloy microstructures. Surface and Coatings Technology, 2001, 137, 122-135.	4.8	111