Erfan Salahinejad

List of Publications by Year
in descending order

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Version: 2024-02-01

83 papers	2,118 citations	185998 28 h-index	301761 39 g-index
84 all docs	84 docs citations	84 times ranked	1543 citing authors

#	Article	IF	Citations
1	Evolution of reinforcement distribution in Alâ€“B4C composites during accumulative roll bonding. Materials & Design, 2011, 32, 3137-3142.	5.1	106
2	Surface Modification of Stainless Steel Orthopedic Implants by Solâ€“Gel ZrTiO₄ and ZrTiO₄â€“PMMA Coatings. Journal of Biomedical Nanotechnology, 2013, 9, 1327-1335.	0.5	76
3	Microstructural phase evaluation of high-nitrogen Feâ€“Crâ€“Mn alloy powders synthesized by the mechanical alloying process. Journal of Materials Science, 2009, 44, 136-148.	1.7	72
4	Multilayer bioactive glass/zirconium titanate thin films in bone tissue engineering and regenerative dentistry. International Journal of Nanomedicine, 2013, 8, 1665.	3.3	67
5	In Vitro Electrochemical Corrosion and Cell Viability Studies on Nickel-Free Stainless Steel Orthopedic Implants. PLoS ONE, 2013, 8, e61633.	1.1	52
6	Structural evolution during mechanical alloying of stainless steels under nitrogen. Powder Technology, 2012, 215-216, 247-253.	2.1	51
7	Microstructural, thermal and magnetic properties of amorphous/nanocrystalline FeCrMnN alloys prepared by mechanical alloying and subsequent heat treatment. Journal of Alloys and Compounds, 2009, 480, 617-624.	2.8	50
8	A new double-layer solâ€“gel coating to improve the corrosion resistance of a medical-grade stainless steel in a simulated body fluid. Materials Letters, 2013, 97, 162-165.	1.3	44
9	Aqueous solâ€“gel synthesis of zirconium titanate (ZrTiO4) nanoparticles using chloride precursors. Ceramics International, 2012, 38, 6145-6149.	2.3	42
10	A new consideration on reinforcement distribution in the different planes of nanostructured metal matrix composite sheets prepared by accumulative roll bonding (ARB). Journal of Alloys and Compounds, 2011, 509, 9562-9564.	2.8	41
11	Nanostructured zirconium titanate fibers prepared by particulate solâ€“gel and cellulose templating techniques. Journal of Alloys and Compounds, 2013, 568, 102-105.	2.8	41
12	Zirconium titanate thin film prepared by an aqueous particulate solâ€“gel spin coating process using carboxymethyl cellulose as dispersant. Materials Letters, 2012, 88, 5-8.	1.3	40
13	Structure, wettability, corrosion and biocompatibility of nitinol treated by alkaline hydrothermal and hydrophobic functionalization for cardiovascular applications. Applied Surface Science, 2020, 506, 144657.	3.1	40
14	Structural characterization of electro-codeposited Niâ€“Al2O3â€“SiC nanocomposite coatings. Journal of Alloys and Compounds, 2014, 611, 161-166.	2.8	38
15	Controlled release from polyurethane films: Drug release mechanisms. Journal of Applied Polymer Science, 2021, 138, 50083.	1.3	38
16	Multilayer zirconium titanate thin films prepared by a solâ€“gel deposition method. Ceramics International, 2013, 39, 1271-1276.	2.3	37
17	The effect of sintering temperature on the structure and mechanical properties of medical-grade powder metallurgy stainless steels. Powder Technology, 2016, 289, 37-43.	2.1	37
18	A combined criterion of surface free energy and roughness to predict the wettability of non-ideal low-energy surfaces. Progress in Organic Coatings, 2018, 119, 123-126.	1.9	36

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19	Microstructure and wear behavior of a porous nanocrystalline nickel-free austenitic stainless steel developed by powder metallurgy. Materials & Design, 2010, 31, 2259-2263.	5.1	34
20	Effects of compocasting process parameters on microstructural characteristics and tensile properties of A356â€“SiCp composites. Transactions of Nonferrous Metals Society of China, 2014, 24, 2482-2488.	1.7	34
21	Processing of ultrafine-grained aluminum by cross accumulative roll-bonding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 595, 131-134.	2.6	33
22	Green Chemical and Biological Synthesis of Nanoparticles and Their Biomedical Applications. , 2015, , 207-235.		33
23	A comparative study on metalâ€“matrix composites fabricated by conventional and cross accumulative roll-bonding processes. Journal of Alloys and Compounds, 2015, 620, 180-184.	2.8	33
24	Surface modification of Ti-6Al-4V alloy for osseointegration by alkaline treatment and chitosan-matrix glass-reinforced nanocomposite coating. Carbohydrate Polymers, 2019, 205, 302-311.	5.1	33
25	Microstructural and hardness evolution of mechanically alloyed Feâ€“Crâ€“Mnâ€“N powders. Journal of Alloys and Compounds, 2010, 497, 369-372.	2.8	32
26	Strontium doping into diopside tissue engineering scaffolds. Ceramics International, 2019, 45, 10176-10181.	2.3	31
27	Biphasic calcium phosphate microspheres in biomedical applications. Journal of Controlled Release, 2021, 338, 527-536.	4.8	31
28	Co-incorporation of strontium and fluorine into diopside scaffolds: Bioactivity, biodegradation and cytocompatibility evaluations. Materials Science and Engineering C, 2019, 103, 109752.	3.8	30
29	Innovative surface modification of orthopaedic implants with positive effects on wettability and in vitro anti-corrosion performance. Surface Engineering, 2014, 30, 688-692.	1.1	29
30	Enhanced sinterability and in vitro bioactivity of diopside through fluoride doping. Ceramics International, 2017, 43, 4680-4686.	2.3	29
31	The effect of nitrogen on the glass-forming ability and micro-hardness of Feâ€“Crâ€“Mnâ€“N amorphous alloys prepared by mechanical alloying. Materials Chemistry and Physics, 2009, 118, 71-75.	2.0	28
32	Corrosive wear behavior of chromium carbide coatings deposited by air plasma spraying. Ceramics International, 2015, 41, 7916-7920.	2.3	28
33	Bioperformance of chitosan/fluoride-doped diopside nanocomposite coatings deposited on medical stainless steel. Carbohydrate Polymers, 2018, 202, 600-610.	5.1	28
34	Characterization of Feâ€“Crâ€“Mnâ€“N amorphous powders with a wide supercooled liquid region developed by mechanical alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1135-1142.	2.6	26
35	3D porous HA/TCP composite scaffolds for bone tissue engineering. Ceramics International, 2022, 48, 22647-22663.	2.3	26
36	Aluminum-matrix composites reinforced with E-glass fibers by cross accumulative roll bonding process. Journal of Alloys and Compounds, 2019, 804, 450-456.	2.8	25

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37	Processing of nanostructured metallic matrix composites by a modified accumulative roll bonding method with structural and mechanical considerations. International Journal of Minerals, Metallurgy and Materials, 2012, 19, 951-956.	2.4	24
38	Vancomycin release kinetics from Mgâ€“Ca silicate porous microspheres developed for controlled drug delivery. Ceramics International, 2020, 46, 508-512.	2.3	24
39	Effects of boron addition on mechanical alloying and ordering behaviors of Feâ€“Alâ€“(B) alloy powders. Journal of Alloys and Compounds, 2010, 493, 645-648.	2.8	23
40	Microstructure and mechanical properties of a new group of nanocrystalline medical-grade stainless steels prepared by powder metallurgy. Journal of Alloys and Compounds, 2015, 624, 17-21.	2.8	23
41	Deposition of nanodiopside coatings on metallic biomaterials to stimulate apatite-forming ability. Materials and Design, 2017, 123, 120-127.	3.3	23
42	Fluoride doping into SiO2-MgO-CaO bioactive glass nanoparticles: bioactivity, biodegradation and biocompatibility assessments. Ceramics International, 2018, 44, 17506-17513.	2.3	23
43	Fabrication, drug delivery kinetics and cell viability assay of PLGA-coated vancomycin-loaded silicate porous microspheres. Ceramics International, 2022, 48, 48-54.	2.3	22
44	The effect of phase heterogeneity on thermoelectric properties of nanostructured silicon germanium alloy. Journal of Applied Physics, 2013, 114, 023705.	1.1	21
45	The effect of sintering time on the densification and mechanical properties of a mechanically alloyed Crâ€“Mnâ€“N stainless steel. Materials & Design, 2010, 31, 527-532.	5.1	20
46	Crystal interstitial sites contribution to nitrogen supersaturation in mechanically alloyed Feâ€“Crâ€“Mnâ€“N alloys. Journal of Alloys and Compounds, 2010, 505, 584-587.	2.8	20
47	Liquid-phase sintering of medical-grade P558 stainless steel using a new biocompatible eutectic additive. Materials Letters, 2012, 74, 209-212.	1.3	20
48	Mechanical strength and biocompatibility of bredigite (Ca7MgSi4O16) tissue-engineering scaffolds modified by aliphatic polyester coatings. Ceramics International, 2020, 46, 16439-16446.	2.3	20
49	Corrosion failure analysis of printed circuit boards exposed to H2S-containing humid environments. Engineering Failure Analysis, 2017, 79, 538-546.	1.8	19
50	Contribution of nitrogen concentration to compressive elastic modulus of 18Crâ€“12Mnâ€“xN austenitic stainless steels developed by powder metallurgy. Materials & Design, 2010, 31, 2241-2244.	5.1	18
51	Drug-delivery Ca-Mg silicate scaffolds encapsulated in PLGA. International Journal of Pharmaceutics, 2020, 589, 119855.	2.6	18
52	Effect of milling time on structure and mechanical properties of porous nickel-free austenitic stainless steels processed by mechanical alloying and sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5522-5527.	2.6	17
53	On the general outline of physical properties of amorphous-nanocrystalline Feâ€“Crâ€“Mnâ€“N alloy powders prepared by mechanical alloying under nitrogen. Journal of Alloys and Compounds, 2011, 509, 3252-3256.	2.8	16
54	Microstructural characterization of medical-grade stainless steel powders prepared by mechanical alloying and subsequent annealing. Advanced Powder Technology, 2013, 24, 605-608.	2.0	16

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55	Cu-(B4C)p metal matrix composites processed by accumulative roll-bonding. Progress in Natural Science: Materials International, 2016, 26, 613-620.	1.8	16
56	Hydrophobization of metallic surfaces by means of Al2O3-HDTMS coatings. Applied Surface Science, 2018, 428, 455-462.	3.1	16
57	The effect of graphene orientation on permeability and corrosion initiation under composite coatings. Construction and Building Materials, 2022, 319, 126080.	3.2	16
58	A system dynamics model to estimate energy, temperature, and particle size in planetary ball milling. Journal of Alloys and Compounds, 2013, 555, 108-111.	2.8	15
59	Zn-HA-TiO₂nanocomposite coatings electrodeposited on a NiTi shape memory alloy. Surface and Interface Analysis, 2015, 47, 176-183.	0.8	15
60	Fabrication of Nanostructured Medical-Grade Stainless Steel by Mechanical Alloying and Subsequent Liquid-Phase Sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2994-2998.	1.1	14
61	Effect of precursor solution pH on the structural and crystallization characteristics of solâ€“gel derived nanoparticles. Journal of Alloys and Compounds, 2014, 589, 182-184.	2.8	14
62	Structure, biomineralization and biodegradation of Ca-Mg oxyfluorosilicates synthesized by inorganic salt coprecipitation. Ceramics International, 2017, 43, 10299-10306.	2.3	14
63	Toward reducing the formation temperature of diopside via wet-chemical synthesis routes using chloride precursors. Ceramics International, 2017, 43, 13781-13785.	2.3	14
64	Incorporation of monovalent cations into diopside to improve biomineralization and cytocompatibility. Ceramics International, 2018, 44, 19200-19206.	2.3	14
65	Influence of annealing temperature on the structural and anti-corrosion characteristics of solâ€“gel derived, spin-coated thin films. Ceramics International, 2014, 40, 2885-2890.	2.3	13
66	Microscopic and spectroscopic evidences for multiple ion-exchange reactions controlling biomineralization of CaO.MgO.2SiO 2 nanoceramics. Ceramics International, 2017, 43, 8502-8508.	2.3	13
67	Tribochemical behavior of alumina coatings deposited by high-velocity oxy fuel spraying. Ceramics International, 2015, 41, 5713-5720.	2.3	12
68	PLGA-coated drug-loaded nanotubes anodically grown on nitinol. Materials Science and Engineering C, 2020, 116, 111174.	3.8	12
69	Organosilane-functionalized hydrothermal-derived coatings on titanium alloys for hydrophobization and corrosion protection. Progress in Organic Coatings, 2020, 142, 105594.	1.9	11
70	Synergistic galvanic-pitting corrosion of copper electrical pads treated with electroless nickel-phosphorus/immersion gold surface finish. Engineering Failure Analysis, 2017, 77, 138-145.	1.8	10
71	Eliminating the irregular surface layer of anodically-grown Ni-Ti-O nanopore arrays in a two-stage anodization. Surface and Coatings Technology, 2021, 405, 126707.	2.2	10
72	Biomineralization, strength and cytocompatibility improvement of bredigite scaffolds through doping/coating. Ceramics International, 2020, 46, 21056-21063.	2.3	10

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73	A novel approach to quantify nitrogen distribution in nanocrystalline-amorphous alloys. Journal of Alloys and Compounds, 2011, 509, 2248-2251.	2.8	9
74	Non-hydrolytic sol-gel processing of chloride precursors loaded at forsterite stoichiometry. Journal of Alloys and Compounds, 2016, 688, 235-241.	2.8	8
75	Compositional homogeneity in a medical-grade stainless steel sintered with a Mnâ€“Si additive. Materials Science and Engineering C, 2012, 32, 2215-2219.	3.8	7
76	A novel method to enhance silicon incorporation into nickel electrodeposited coatings. Vacuum, 2016, 134, 103-109.	1.6	7
77	Competition of carrier bioresorption and drug release kinetics of vancomycin-loaded silicate macroporous microspheres to determine cell biocompatibility. Ceramics International, 2020, 46, 26156-26159.	2.3	6
78	Effect of poly lactic-co-glycolic acid encapsulation on drug delivery kinetics from vancomycin-impregnated Ca-Mg silicate scaffolds. Progress in Organic Coatings, 2020, 149, 105970.	1.9	6
79	Inorganic-salt coprecipitation synthesis, fluoride-doping, bioactivity and physiological pH buffering evaluations of bredigite. Ceramics International, 2020, 46, 13292-13296.	2.3	6
80	Is cell viability always directly related to corrosion resistance of stainless steels?. Materials Science and Engineering C, 2016, 62, 439-443.	3.8	4
81	Post-annealing, fractographic and corrosion failure analyses on tri-modal Mn-particulate Al/Cu multilayered composites. Vacuum, 2017, 139, 87-92.	1.6	4
82	Nanobiomaterials in periodontal tissue engineering. , 2016, , 323-351.		2
83	Morphological Optimization of Chemical-Conversion Sodium Titanate and Chitosan/Glass Nanocomposite Dip Coatings Deposited on a Titanium Alloy. Metals and Materials International, 2020, 26, 188-195.	1.8	2