

# Sayed Mahmood Rabiee

## List of Publications by Year in descending order

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87  
papers

1,661  
citations

393982

19  
h-index

315357

38  
g-index

90  
all docs

90  
docs citations

90  
times ranked

2235  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Effect of ion substitution on properties of bioactive glasses: A review. <i>Ceramics International</i> , 2015, 41, 7241-7251.   | 2.3 | 216       |
| 2  | Synthesis and characterization of hydroxyapatite/chitosan nanocomposite materials for medical engineering applications. <i>Composites Part B: Engineering</i> , 2012, 43, 1881-1886.  | 5.9 | 174       |
| 3  | Synthesis, characterization and bioactivity investigation of bioglass/hydroxyapatite composite. <i>Ceramics International</i> , 2010, 36, 291-297.  | 2.3 | 155       |
| 4  | Experimental assessment of functionally graded reinforced concrete (FGRC) slabs under drop weight and projectile impacts. <i>Construction and Building Materials</i> , 2015, 95, 296-311.   | 3.2 | 82        |
| 5  | Dextran hydrogels incorporated with bioactive glass-ceramic: Nanocomposite scaffolds for bone tissue engineering. <i>Carbohydrate Polymers</i> , 2018, 190, 281-294.  | 5.1 | 71        |
| 6  | Bone regeneration based on nano-hydroxyapatite and hydroxyapatite/chitosan nanocomposites: an in vitro and in vivo comparative study. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.  | 0.8 | 51        |
| 7  | Development and characterization of a bioglass/chitosan composite as an injectable bone substitute. <i>Carbohydrate Polymers</i> , 2017, 157, 1261-1271.  | 5.1 | 50        |
| 8  | Fabrication and characterization of dextran/nanocrystalline $\beta$ -tricalcium phosphate nanocomposite hydrogel scaffolds. <i>International Journal of Biological Macromolecules</i> , 2020, 148, 434-448.                                       | 3.6 | 46        |
| 9  | Antimicrobial effect, frictional resistance, and surface roughness of stainless steel orthodontic brackets coated with nanofilms of silver and titanium oxide: a preliminary study. <i>Microscopy Research and Technique</i> , 2017, 80, 599-607. | 1.2 | 41        |
| 10 | Synthesis of nano-bioactive glass-ceramic powders and its in vitro bioactivity study in bovine serum albumin protein. <i>Journal of Molecular Structure</i> , 2011, 998, 37-41.   | 1.8 | 36        |
| 11 | Synthesis and characterization of hydroxyapatite cement. <i>Journal of Molecular Structure</i> , 2010, 969, 172-175.  | 1.8 | 35        |
| 12 | Effect of ECAP on microstructure and tensile properties of A390 aluminum alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2019, 29, 931-940.  | 1.7 | 35        |
| 13 | Antibacterial activity of silver photodeposited nepheline thin film coatings. <i>Ceramics International</i> , 2012, 38, 5445-5451.  | 2.3 | 33        |
| 14 | Hydroxyapatite scaffolds infiltrated with thermally crosslinked polycaprolactone fumarate and polycaprolactone itaconate. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 98A, 257-267.  | 2.1 | 28        |
| 15 | Biocompatibility and Mineralization Activity of Fresh or Set White Mineral Trioxide Aggregate, Biomimetic Carbonated Apatite, and Synthetic Hydroxyapatite. <i>Journal of Endodontics</i> , 2010, 36, 1036-1041.                                  | 1.4 | 26        |
| 16 | Design and Analysis of Porous Functionally Graded Femoral Prostheses with Improved Stress Shielding. <i>Designs</i> , 2020, 4, 12.  | 1.3 | 23        |
| 17 | Synergic effect of chitosan and dicalcium phosphate on tricalcium silicate-based nanocomposite for root-end dental application. <i>Materials Science and Engineering C</i> , 2017, 80, 631-641.   | 3.8 | 22        |
| 18 | Three-dimensional laser drilling of polymethyl methacrylate (PMMA) scaffold used for bone regeneration. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 84, 2649-2657.  | 1.5 | 21        |

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|----|---|-----|-----------|
| 19 | The effects of silver coating on friction coefficient and shear bond strength of steel orthodontic brackets. <i>Scanning</i> , 2015, 37, 294-299.   | 0.7 | 20        |
| 20 | Layered manufacturing of a three-dimensional polymethyl methacrylate (PMMA) scaffold used for bone regeneration. <i>Materials Technology</i> , 2019, 34, 167-177.   | 1.5 | 20        |
| 21 | Effects of prior ECAP process on the dynamic impact behaviors of hypereutectic Al-Si alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 793, 139902.        | 2.6 | 19        |
| 22 | The fabrication of nanocomposites via calcium phosphate formation on gelatin-chitosan network and the gelatin influence on the properties of biphasic composites. <i>Materials Science and Engineering C</i> , 2013, 33, 370-375.     | 3.8 | 18        |
| 23 | The effect of bioactive glass nanoparticles on polycaprolactone/chitosan scaffold: Melting enthalpy and cell viability. <i>Journal of Bioactive and Compatible Polymers</i> , 2019, 34, 97-111.                                       | 0.8 | 18        |
| 24 | Study of biodegradable ceramic bone graft substitute. <i>Advances in Applied Ceramics</i> , 2008, 107, 199-202.   | 0.6 | 17        |
| 25 | Mechanical strength and setting times estimation of hydroxyapatite cement by using neural network. <i>Materials &amp; Design</i> , 2010, 31, 2585-2591.   | 5.1 | 17        |
| 26 | Mechanical behavior of a new biphasic calcium phosphate bone graft. <i>Biotechnology and Bioprocess Engineering</i> , 2008, 13, 204-209.  | 1.4 | 16        |
| 27 | The modified Mori-Tanaka scheme for the prediction of the effective elastic properties of highly porous ceramics. <i>Ceramics International</i> , 2018, 44, 16489-16497.  | 2.3 | 16        |
| 28 | A novel modification for polymer sponge method to fabricate the highly porous composite bone scaffolds with large aspect ratio suitable for repairing critical-sized bone defects. <i>Vacuum</i> , 2020, 176, 109316.                 | 1.6 | 16        |
| 29 | EBS D study of the microstructure and texture evolution in an Al-Si-Cu alloy processed by route A ECAP. <i>Journal of Alloys and Compounds</i> , 2021, 858, 157651.   | 2.8 | 16        |
| 30 | Preparation, mechanical properties, and <i>in vitro</i> biocompatibility of novel nanocomposites based on polyhexamethylene carbonate fumarate and nanohydroxyapatite. <i>Polymers for Advanced Technologies</i> , 2011, 22, 605-611. | 1.6 | 15        |
| 31 | Effect of hot rolling on microstructure, crystallographic texture, and hardness of AZ31 alloy. <i>Materials Chemistry and Physics</i> , 2021, 273, 125130.  | 2.0 | 15        |
| 32 | Thermal stability of nanocrystalline Mg-based alloys prepared via mechanical alloying. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 398-405.   | 1.7 | 14        |
| 33 | In vitro apatite formation of calcium phosphate composite synthesized from fish bone. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 1969-1978.   | 1.1 | 13        |
| 34 | Texture and microstructure evolution of A390 aluminum alloy during ECAP. <i>Materials Research Express</i> , 2019, 6, 076536.   | 0.8 | 13        |
| 35 | Prediction of the Setting Properties of Calcium Phosphate Bone Cement. <i>Computational Intelligence and Neuroscience</i> , 2012, 2012, 1-8.  | 1.1 | 12        |
| 36 | Electrospun Poly- $\epsilon$ -Caprolactone (PCL)/Dicalcium Phosphate Dihydrate (DCPD) Composite Scaffold for Tissue Engineering Application. <i>Molecular Biotechnology</i> , 2019, 61, 345-354.                                      | 1.3 | 12        |

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|----|---|-----|-----------|
| 37 | Development of hydroxyapatite bone cement for controlled drug release via tetracycline hydrochloride. Bulletin of Materials Science, 2013, 36, 171-174.   | 0.8 | 11        |
| 38 | Fabrication and physicochemical characterization of a novel magnetic nanocomposite scaffold: Electromagnetic field effect on biological properties. Materials Science and Engineering C, 2020, 116, 111222.   | 3.8 | 11        |
| 39 | Synthesis and Characterization of Amorphous Nano-Alumina Powders with High Surface Area for Biodiesel Production. Chemical Engineering and Technology, 2013, 36, 1708-1712.   | 0.9 | 10        |
| 40 | Histopathological, Histomorphometrical, and Radiographical Evaluation of Injectable Glass-Ceramic-Chitosan Nanocomposite in Bone Reconstruction of Rat. International Journal of Biomaterials, 2015, 2015, 1-8.   | 1.1 | 10        |
| 41 | Effect of route BC-ECAP on microstructural evolution and mechanical properties of Al-Si-Cu alloy. Journal of Materials Science, 2021, 56, 3535-3550.  | 1.7 | 10        |
| 42 | In-vitro formation and growth kinetics of apatite on a new light-cured composite calcium phosphate cement. Ceramics International, 2018, 44, 15317-15322.   | 2.3 | 9         |
| 43 | Association of a synthetic bone graft and bone marrow cells as a composite biomaterial. Biotechnology and Bioprocess Engineering, 2009, 14, 1-5.  | 1.4 | 8         |
| 44 | Effect of Zirconia Concentration on the Growth of Nanowires in Bioactive Glass-Ceramic Coatings. International Journal of Applied Ceramic Technology, 2013, 10, 33-39.  | 1.1 | 8         |
| 45 | Application of self-learning evolutionary algorithm for optimal design of a porous polymethylmethacrylate scaffold fabricated by laser drilling process. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2013, 227, 211-224. | 1.4 | 8         |
| 46 | Structural Behavior and In Vitro Bioactivity Evaluation of Sol-Gel Derived Glass-Ceramics Based on SiO <sub>2</sub> - CaO- P <sub>2</sub> O <sub>5</sub> - ZnO System. Silicon, 2018, 10, 67-75.  | 1.8 | 8         |
| 47 | Use of rapid microwave sintering technique for the processing of magnesium-hydroxyapatite composites. Ceramics International, 2021, 47, 13023-13034.  | 2.3 | 8         |
| 48 | Characterization of magnesium-hydroxyapatite functionally graded composites prepared by rapid microwave sintering technique. Ceramics International, 2022, 48, 12641-12653.   | 2.3 | 8         |
| 49 | Evaluating Initial Content of the Slurry and Cooling Rate on the Microstructural and Mechanical Characteristics of Freeze Casted Hydroxyapatite Macroporous Scaffolds. Key Engineering Materials, 0, 529-530, 147-152.  | 0.4 | 7         |
| 50 | Histopathological evaluation of potential impact of $\beta$ -tricalcium phosphate (HA+ $\beta$ -TCP) granules on healing of segmental femur bone defect. Bratislava Medical Journal, 2015, 116, 30-34.  | 0.4 | 7         |
| 51 | Direct Impregnation of MgO Nanoparticles in 58S Bioactive Glass: Bioactivity Evaluation and Antibacterial Activity. Iranian Journal of Science and Technology, Transaction A: Science, 2021, 45, 885-898.   | 0.7 | 7         |
| 52 | Novel calcium phosphate coated calcium silicate-based cement: <i>in vitro</i> evaluation. Biomedical Materials (Bristol), 2020, 15, 035008.   | 1.7 | 6         |
| 53 | Biological and bioactivity assessment of dextran nanocomposite hydrogel for bone regeneration. Progress in Biomaterials, 2021, 10, 271-280.   | 1.8 | 6         |
| 54 | Effect of Alumina on Microstructure and Compressive Strength of a Porous Silicated Hydroxyapatite. Journal of Applied Biomaterials and Functional Materials, 2014, 12, 102-106.   | 0.7 | 5         |

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|----|--|-----|-----------|
| 55 | Three-dimensional printing of truss-like structure for use in scaffold: Experimental, numerical, and analytical analyses. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 3133-3142. | 1.1 | 5         |
| 56 | Influence of Crystallographic Texture on the Corrosion Product Morphology and Corrosion Rate of AZ31 Plate in Simulated Body Fluid. Journal of Materials Engineering and Performance, 2020, 29, 3824-3830.   | 1.2 | 5         |
| 57 | In-vitro evaluation and antibacterial activity of ZnO nanoparticles deposited on hydroxyapatite tablets by RF magnetron sputtering. Materials Today Communications, 2021, 28, 102520.  | 0.9 | 5         |
| 58 | Microstructural and mechanical properties of Al-Al <sub>2</sub> O <sub>3</sub> composites focus on experimental techniques. International Journal of Microstructure and Materials Properties, 2016, 11, 383.   | 0.1 | 5         |
| 59 | Microstructural and mechanical properties of Al-Al <sub>2</sub> O <sub>3</sub> composites focus on experimental techniques. International Journal of Microstructure and Materials Properties, 2016, 11, 383.   | 0.1 | 4         |
| 60 | Effect of CO <sub>2</sub> laser power intensity on the surface morphology and friction behavior of alumina ceramic brackets. Microscopy Research and Technique, 2017, 80, 923-929.   | 1.2 | 4         |
| 61 | Nanostructured akermanite glass-ceramic coating on Ti6Al4V for orthopedic applications. Journal of Applied Biomaterials and Functional Materials, 2019, 17, 228080001879381.   | 0.7 | 4         |
| 62 | Influence of Thermomechanical Processing on the Microstructure and Tensile Behavior of Solution-Treated Al-18%Si-4.5%Cu Alloy. Journal of Materials Engineering and Performance, 2021, 30, 4651-4668.  | 1.2 | 4         |
| 63 | Prediction of the effective elastic moduli of porous bone scaffolds: Analytical and computational studies. International Journal of Modern Physics C, 2022, 33, .  | 0.8 | 4         |
| 64 | Quenched/unquenched nano bioactive glass-ceramics: Synthesis and in vitro bioactivity evaluation in Ringer's solution with BSA. Chemical Industry and Chemical Engineering Quarterly, 2013, 19, 231-239.   | 0.4 | 3         |
| 65 | Characterization of porous Ti-bioglass composite produced by mechanical milling and space holder sintering. Rare Metals, 2015, 34, 638-644.  | 3.6 | 3         |
| 66 | Investigation of hydroxyapatite dicalcium phosphate scaffold properties using a Lamarckian immune neural network. International Journal of Computer Applications in Technology, 2016, 53, 323.   | 0.3 | 3         |
| 67 | Nanoscale Multi-Layer Thin Film Fabricated by Cathodic Arc Evaporation (CAE) Method. Journal of Superhard Materials, 2020, 42, 78-89.  | 0.5 | 3         |
| 68 | Titanium Dioxide Nanotubes Incorporated Bioactive Glass Nanocomposites: Synthesis, Characterization, Bioactivity Evaluation and Drug Loading. International Journal of Engineering, Transactions A: Basics, 2021, 34, .                                    | 0.5 | 3         |
| 69 | Textural Evaluation of Al <sub>2</sub> O <sub>3</sub> -Cu Alloy Processed by Route BC-ECAP. Metals and Materials International, 2021, 27, 2756-2772.   | 1.8 | 3         |
| 70 | Novel Methods for Adding Metal Oxides Nanoparticles to Bioactive Glass 58S Matrix: A Characterization and Bioactivity Evaluation Study. Silicon, 0, , 1.   | 1.8 | 3         |
| 71 | Optimization of composite bone scaffolds prepared by a new modified foam replica technique. Materials Today Communications, 2022, 31, 103293.  | 0.9 | 3         |
| 72 | The Release Behavior, Biocompatibility and Physical Properties of Ald-loaded Strontium Doped Calcium Phosphate Cement. Journal of Bionic Engineering, 2020, 17, 1209-1223.   | 2.7 | 2         |

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|----|---|-----|-----------|
| 73 | Experimental and numerical investigation of polymethyl methacrylate scaffolds for bone tissue engineering. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2020, 234, 586-594. | 0.7 | 2         |
| 74 | Bioactivity evaluation of printable calcium polyphosphate/alginate cement for bone tissue engineering; In vitro study. Bioprinting, 2022, 27, e00210.   | 2.9 | 2         |
| 75 | Syntheses, characterization and comparative study of bone regeneration on nano hydroxyapatite and hydroxyapatite/chitosan nanocomposite in rat. , 2011, , .   |     | 1         |
| 76 | Calcium Phosphate/Etidronate Disodium Biocement: Etidronate, Retarder or Accelerator. Nano Biomedicine and Engineering, 2014, 6, .  | 0.3 | 1         |
| 77 | A Freestanding Sol-Gel Technique for Growth of Nanowire Arrays in SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> -ZrO <sub>2</sub> System. Silicon, 2016, 8, 233-237.  | 1.8 | 1         |
| 78 | Effect of Route BC Equal-Channel Angular Pressing on the Microstructure, Microtexture, and Homogeneity of Al-18%Si-4.5%Cu Alloy. Journal of Materials Engineering and Performance, 2021, 30, 1577-1601.                                       | 1.2 | 1         |
| 79 | Corrosion Behavior of TiN/CrN Nanoscale Multi-layered Coating in Ringer's Solution. International Journal of Engineering Transactions B: Applications, 2020, 33, .  | 0.6 | 1         |
| 80 | Evaluation of Antibacterial Effects of Silver-Coated Stainless Steel Orthodontic Brackets. Journal of Dentistry of Tehran University of Medical Sciences, 2016, 13, 49-54.  | 0.4 | 1         |
| 81 | Influence of calcination parameters on the microstructure, magnetic and hyperthermia properties of Zn-Co ferrite nanoparticles. Journal of Electroceramics, 2022, 48, 157-168.  | 0.8 | 1         |
| 82 | Porous tricalcium phosphate scaffold for bone substitute. , 2011, , .   |     | 0         |
| 83 | Influence of zirconia on microstructure of bioactive glass coated on stainless steel for biomedical application. , 2012, , .  |     | 0         |
| 84 | Mechanical Properties Improvement of Porous Titanium-Bioglass Nanocomposites by Mechanical Alloying. Advanced Materials Research, 0, 829, 319-323.  | 0.3 | 0         |
| 85 | Textureâ€Microstructure Correlation in Hot-Rolled AZ31. Transactions of the Indian Institute of Metals, 2019, 72, 1775-1781.  | 0.7 | 0         |
| 86 | Clinical, Histological and Histomorphometric Evaluation of Effects of Silver Ion Coating of Orthodontic Fixed Retainers on Gingival Health in Rabbits. Biomedical and Pharmacology Journal, 2017, 10, 525-533.                                | 0.2 | 0         |
| 87 | Exploring the Dependence of Magnetic and Structural Properties on Co-precipitated Replacement of Zn in CoFe <sub>2</sub> O <sub>4</sub> Nanoparticles. Journal of Electronic Materials, 2022, 51, 2552-2563.                                  | 1.0 | 0         |