# Mengguo Ren

List of Publications by Year
in descending order

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| 21 | 953 | 394421 19 | 713466 21 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 22 | 22 | 22 | 799 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Crack self-healing of phytic acid conversion coating on AZ31 magnesium alloy by heat treatment and the corrosion resistance. Applied Surface Science, 2014, 313, 896-904. | 6.1 | 118 |
| 2 | Structure of International Simple Glass and properties of passivating layer formed in circumneutral pH conditions. Npj Materials Degradation, 2018, 2, . | 5.8 | 91 |
| 3 | Calcium phosphate glass/MgF2 double layered composite coating for improving the corrosion resistance of magnesium alloy. Journal of Alloys and Compounds, 2014, 591, 34-40. | 5.5 | 80 |
| 4 | Solâ€“gel derived mesoporous 58S bioactive glass coatings on AZ31 magnesium alloy and in vitro degradation behavior. Surface and Coatings Technology, 2014, 240, 137-144. | 4.8 | 64 |
| 5 | Bioactive glassâ€“ceramic coating for enhancing the in vitro corrosion resistance of biodegradable Mg alloy. Applied Surface Science, 2012, 259, 799-805. | 6.1 | 55 |
| 6 | Preparation and characterization of mesoporous 45S5 bioactive glassâ€“ceramic coatings on magnesium alloy for corrosion protection. Journal of Alloys and Compounds, 2013, 580, 290-297. | 5.5 | 50 |
| 7 | Composition â€“ structure â€“ property relationships in alkali aluminosilicate glasses: A combined experimental â€“ computational approach towards designing functional glasses. Journal of Non-Crystalline Solids, 2019, 505, 144-153. | 3.1 | 48 |
| 8 | B<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub> substitution effect on structure and properties of Na<sub>2</sub>Oâ€“CaOâ€“SrOâ€“P<sub>2</sub>O<sub>5</sub>â€“SiO<sub>2</sub> bioactive glasses from molecular dynamics simulations. Physical Chemistry Chemical Physics, 2018, 20, 14090-14104. | 2.8 | 47 |
| 9 | Bulk, surface structures and properties of sodium borosilicate and boroaluminosilicate nuclear waste glasses from molecular dynamics simulations. Journal of Non-Crystalline Solids, 2017, 476, 87-94. | 3.1 | 44 |
| 10 | Searching for correlations between vibrational spectral features and structural parameters of silicate glass network. Journal of the American Ceramic Society, 2020, 103, 3575-3589. | 3.8 | 43 |
| 11 | Effects of boron oxide substitution on the structure and bioactivity of SrO-containing bioactive glasses. Journal of Materials Science, 2017, 52, 8793-8811. | 3.7 | 40 |
| 12 | Influence of heat treatment on crystallization and corrosion behavior of calcium phosphate glass coated AZ31 magnesium alloy by solâ€“gel method. Journal of Non-Crystalline Solids, 2013, 369, 69-75. | 3.1 | 36 |
| 13 | 45S5 bioactive glassâ€“ceramic coated AZ31 magnesium alloy with improved corrosion resistance. Surface and Coatings Technology, 2013, 228, 154-161. | 4.8 | 34 |
| 14 | Mixed Network Former Effect on Structure, Physical Properties, and Bioactivity of 45S5 Bioactive Glasses: An Integrated Experimental and Molecular Dynamics Simulation Study. Journal of Physical Chemistry B, 2018, 122, 2564-2577. | 2.6 | 34 |
| 15 | Fabrication and corrosion resistance of calcium phosphate glass-ceramic coated Mg alloy via a PEG assisted solâ€“gel method. Ceramics International, 2014, 40, 3389-3398. | 4.8 | 33 |
| 16 | Structural Origin of the Thermal and Diffusion Behaviors of Lithium Aluminosilicate Crystal Polymorphs and Glasses. Journal of the American Ceramic Society, 2016, 99, 2823-2833. | 3.8 | 33 |
| 17 | Structural features of ISG borosilicate nuclear waste glasses revealed from high-energy X-ray diffraction and molecular dynamics simulations. Journal of Nuclear Materials, 2019, 515, 284-293. | 2.7 | 33 |
| 18 | Surface structures of sodium borosilicate glasses from molecular dynamics simulations. Journal of the American Ceramic Society, 2017, 100, 2516-2524. | 3.8 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Effects of surface initial condition on aqueous corrosion of glassâ€"A study with a model nuclear waste glass. Journal of the American Ceramic Society, 2019, 102, 1652-1664. | 3.8 | 26 |
| 20 | Surface characteristics and corrosion resistance of solâ€"gel derived CaOâ€"P2O5â€"SrOâ€"Na2O bioglassâ€"ceramic coated Mg alloy by different heat-treatment temperatures. Journal of Sol-Gel Science and Technology, 2013, 67, 629-638. | 2.4 | 9 |
| 21 | 45S5 bioactive glass-ceramic coated magnesium alloy with strong interfacial bonding strength by â€œsuperplasticity diffusion bondingâ€. Materials Letters, 2015, 141, 96-99. | 2.6 | 8 |