Rui M Novais

List of Publications by Year
in descending order

90 papers	3,511 citations	117625 34 h-index	149698 56 g-index
92 all docs	92 docs citations	92 times ranked	3220 citing authors

#	Article	IF	Citations
1	Biomass fly ash geopolymer monoliths for effective methylene blue removal from wastewaters. Journal of Cleaner Production, 2018, 171, 783-794.	9.3	190
2	Novel porous fly-ash containing geopolymer monoliths for lead adsorption from wastewaters. Journal of Hazardous Materials, 2016, 318, 631-640.	12.4	186
3	Porous biomass fly ash-based geopolymers with tailored thermal conductivity. Journal of Cleaner Production, 2016, 119, 99-107.	9.3	168
4	Geopolymer foams: An overview of recent advancements. Progress in Materials Science, 2020, 109, 100621.	32.8	161
5	Synthesis of porous biomass fly ash-based geopolymer spheres for efficient removal of methylene blue from wastewaters. Journal of Cleaner Production, 2019, 207, 350-362.	9.3	140
6	Effect of marble and granite sludge in clay materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 419, 306-309.	5.6	121
7	Waste glass from end-of-life fluorescent lamps as raw material in geopolymers. Waste Management, 2016, 52, 245-255.	7.4	108
8	Extremely fast and efficient methylene blue adsorption using eco-friendly cork and paper waste-based activated carbon adsorbents. Journal of Cleaner Production, 2018, 197, 1137-1147.	9.3	106
9	Influence of blowing agent on the fresh- and hardened-state properties of lightweight geopolymers. Materials and Design, 2016, 108, 551-559.	7.0	102
10	Wastes from pulp and paper mills - a review of generation and recycling alternatives. Ceramica, 2018, 64, 443-453.	0.8	76
11	Novel porous fly ash-containing geopolymers for pH buffering applications. Journal of Cleaner Production, 2016, 124, 395-404.	9.3	73
12	A Review of Solar Thermochemical CO2 Splitting Using Ceria-Based Ceramics With Designed Morphologies and Microstructures. Frontiers in Chemistry, 2019, 7, 601.	3.6	72
13	Influence of water and aluminium powder content on the properties of waste-containing geopolymer foams. Ceramics International, 2018, 44, 6242-6249.	4.8	68
14	Ceramic tiles with controlled porosity and low thermal conductivity by using pore-forming agents. Ceramics International, 2014, 40, 11637-11648.	4.8	62
15	Controlled Functionalization of Carbon Nanotubes by a Solvent-free Multicomponent Approach. ACS Nano, 2010, 4, 7379-7386.	14.6	57
16	Porous geopolymer spheres as novel pH buffering materials. Journal of Cleaner Production, 2017, 143, 1114-1122.	9.3	56
17	Innovative application for bauxite residue: Red mud-based inorganic polymer spheres as pH regulators. Journal of Hazardous Materials, 2018, 358, 69-81.	12.4	56
18	In-situ synthesis of zeolites by geopolymerization of biomass fly ash and metakaolin. Materials Letters, 2019, 236, 644-648.	2.6	56

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19	High pH buffer capacity biomass fly ash-based geopolymer spheres to boost methane yield in anaerobic digestion. Journal of Cleaner Production, 2018, 178, 258-267.	9.3	55
20	Use of modified bauxite residue-based porous inorganic polymer monoliths as adsorbents of methylene blue. Journal of Cleaner Production, 2019, 227, 877-889.	9.3	55
21	Synthesis and characterization of hematite pigment obtained from a steel waste industry. Journal of Hazardous Materials, 2011, 192, 1307-1313.	12.4	53
22	Development of mortars containing superabsorbent polymer. Construction and Building Materials, 2015, 95, 575-584.	7.2	51
23	Unzipping of Functionalized Multiwall Carbon Nanotubes Induced by STM. Nano Letters, 2010, 10, 1764-1768.	9.1	50
24	The effect of flow type and chemical functionalization on the dispersion of carbon nanofiber agglomerates in polypropylene. Composites Part A: Applied Science and Manufacturing, 2012, 43, 833-841.	7.6	49
25	Waste-containing clinkers: Valorization of alternative mineral sources from pulp and paper mills. Chemical Engineering Research and Design, 2017, 109, 106-116.	5.6	49
26	Effect of the particle size range of construction and demolition waste on the fresh and hardened-state properties of fly ash-based geopolymer mortars with total replacement of sand. Chemical Engineering Research and Design, 2019, 129, 130-137.	5.6	48
27	Biphasic apatite-carbon materials derived from pyrolysed fish bones for effective adsorption of persistent pollutants and heavy metals. Journal of Environmental Chemical Engineering, 2017, 5, 4884-4894.	6.7	47
28	Synthesis of ceramic pigments from industrial wastes: Red mud and electroplating sludge. Waste Management, 2018, 80, 371-378.	7.4	46
29	Effect of nanosilica and microsilica on microstructure and hardened properties of cement pastes and mortars. Advances in Applied Ceramics, 2010, 109, 104-110.	1.1	45
30	The influence of TiO2 and ZnO powder mixtures on photocatalytic activity and rheological behavior of cement pastes. Construction and Building Materials, 2014, 65, 191-200.	7.2	43
31	Solar thermochemical CO2 splitting using cork-templated ceria ecoceramics. Journal of CO2 Utilization, 2018, 26, 552-563.	6.8	42
32	Effective mechanical reinforcement of inorganic polymers using glass fibre waste. Journal of Cleaner Production, 2017, 166, 343-349.	9.3	41
33	Upcycling unexplored dregs and biomass fly ash from the paper and pulp industry in the production of eco-friendly geopolymer mortars: A preliminary assessment. Construction and Building Materials, 2018, 184, 464-472.	7.2	40
34	Eco-friendly approach to enhance the mechanical performance of geopolymer foams: Using glass fibre waste coming from wind blade production. Construction and Building Materials, 2020, 239, 117805.	7.2	39
35	Incorporation of glass fibre fabrics waste into geopolymer matrices: An eco-friendly solution for off-cuts coming from wind turbine blade production. Construction and Building Materials, 2018, 187, 876-883.	7.2	38
36	Metals removal from aqueous solutions by tailored porous waste-based granulated alkali-activated materials. Applied Clay Science, 2019, 179, 105147.	5.2	38

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37	Sustainable and efficient cork - inorganic polymer composites: An innovative and eco-friendly approach to produce ultra-lightweight and low thermal conductivity materials. Cement and Concrete Composites, 2019, 97, 107-117.	10.7	38
38	Red mud as a substitute coloring agent for the hematite pigment. Ceramics International, 2018, 44, 4211-4219.	4.8	37
39	Waste-based geopolymeric mortars with very high moisture buffering capacity. Construction and Building Materials, 2018, 191, 39-46.	7.2	37
40	Wood waste incorporation for lightweight porcelain stoneware tiles with tailored thermal conductivity. Journal of Cleaner Production, 2015, 90, 66-72.	9.3	34
41	Poly(lactic acid) composites with poly(lactic acid)â€modified carbon nanotubes. Journal of Polymer Science Part A, 2013, 51, 3740-3750.	2.3	33
42	Multifunctional cork â€“ alkali-activated fly ash composites: A sustainable material to enhance buildingsâ€™ energy and acoustic performance. Energy and Buildings, 2020, 210, 109739.	6.7	33
43	Influence of added nanosilica and/or silica fume on fresh and hardened properties of mortars and cement pastes. Advances in Applied Ceramics, 2009, 108, 418-428.	1.1	31
44	Study of cure conditions effect on the properties of wood biomass fly ash geopolymers. Journal of Materials Research and Technology, 2020, 9, 7518-7528.	5.8	30
45	The influence of carbon nanotube functionalization route on the efficiency of dispersion in polypropylene by twin-screw extrusion. Composites Part A: Applied Science and Manufacturing, 2012, 43, 2189-2198.	7.6	29
46	Lightweight dense/porous PCM-ceramic tiles for indoor temperature control. Energy and Buildings, 2015, 108, 205-214.	6.7	28
47	Pyrolysed cork-geopolymer composites: A novel and sustainable EMI shielding building material. Construction and Building Materials, 2019, 229, 116930.	7.2	28
48	Development of new geopolymers based on stone cutting waste. Construction and Building Materials, 2020, 257, 119525.	7.2	28
49	High performance cork-templated ceria for solar thermochemical hydrogen production via two-step water-splitting cycles. Sustainable Energy and Fuels, 2020, 4, 3077-3089.	4.9	26
50	Assessment of the single and combined effect of superabsorbent particles and porogenic agents in nanotitania-containing mortars. Energy and Buildings, 2016, 127, 980-990.	6.7	24
51	The influence of TiO2 nanoparticles and poliacrilonitrile fibers on the rheological behavior and hardened properties of mortars. Construction and Building Materials, 2015, 75, 315-330.	7.2	21
52	Waste-Based One-Part Alkali Activated Materials. Materials, 2021, 14, 2911.	2.9	21
53	Rheological characterisation of cement pastes with nanosilica, silica fume and superplasticiser additions. Advances in Applied Ceramics, 2010, 109, 213-218.	1.1	20
54	Assessment of the recycling potential of stone processing plant wastes based on physicochemical features and market opportunities. Journal of Cleaner Production, 2021, 319, 128678.	9.3	20

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55	Green geopolymeric concrete using grits for applications in construction. Materials Letters, 2018, 233, 94-97.	2.6	19
56	A sustainable multi-function biomorphic material for pollution remediation or UV absorption: Aerosol assisted preparation of highly porous ZnO-based materials from cork templates. Journal of Environmental Chemical Engineering, 2019, 7, 102936.	6.7	19
57	Modifications of basic-oxygen-furnace slag microstructure and their effect on the rheology and the strength of alkali-activated binders. Cement and Concrete Composites, 2019, 97, 143-153.	10.7	19
58	Solar Redox Cycling of Ceria Structures Based on Fiber Boards, Foams, and Biomimetic Cork-Derived Ecoceramics for Two-Step Thermochemical H₂O and CO₂ Splitting. Energy & Fuels, 2020, 34, 9037-9049.	5.1	19
59	Ecoceramics. Materials Today, 2017, 20, 45-46.	14.2	18
60	Highly efficient lead extraction from aqueous solutions using inorganic polymer foams derived from biomass fly ash and metakaolin. Journal of Environmental Management, 2020, 272, 111049.	7.8	15
61	Lightweight dense/porous bi-layered ceramic tiles prepared by double pressing. Journal of Materials Processing Technology, 2015, 216, 169-177.	6.3	14
62	Cellular ceramics obtained by a combination of direct foaming of soybean oil emulsified alumina suspensions with gel consolidation using gelatin. Ceramics International, 2018, 44, 2436-2445.	4.8	14
63	PCM-containing bi-layered alkali-activated materials: A novel and sustainable route to regulate the temperature and humidity fluctuations inside buildings. Building and Environment, 2021, 205, 108281.	6.9	14
64	Zeolitesâ€containing geopolymers obtained from biomass fly ash: Influence of temperature, composition, and porosity. Journal of the American Ceramic Society, 2021, 104, 803-815.	3.8	13
65	Comparison of low and high pressure infiltration regimes on the density and highly porous microstructure of ceria ecoceramics made from sustainable cork templates. Journal of the European Ceramic Society, 2019, 39, 1287-1296.	5.7	12
66	In-depth investigation of the long-term strength and leaching behaviour of inorganic polymer mortars containing green liquor dregs. Journal of Cleaner Production, 2019, 220, 630-641.	9.3	12
67	Mix design and mechanical performance of geopolymer binder for sustainable construction and building material. IOP Conference Series: Materials Science and Engineering, 2017, 264, 012002.	0.6	11
68	Red mud and electroplating sludge as coloring agents of distinct glazes: The influence of heat treatment. Materials Letters, 2018, 223, 166-169.	2.6	11
69	Bi-Layered Porous/Cork-Containing Waste-Based Inorganic Polymer Composites: Innovative Material towards Green Buildings. Applied Sciences (Switzerland), 2020, 10, 2995.	2.5	11
70	Unravelling the Affinity of Alkali-Activated Fly Ash Cubic Foams towards Heavy Metals Sorption. Materials, 2022, 15, 1453.	2.9	10
71	Red mud-based inorganic polymer spheres bulk-type adsorbents and pH regulators. Materials Today, 2019, 23, 105-106.	14.2	8
72	Red mud-based inorganic polymer spheres: Innovative and environmentally friendly anaerobic digestion enhancers. Bioresource Technology, 2020, 316, 123904.	9.6	8

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73	Hidden value in low-cost inorganic pigments as potentially valuable magnetic materials. Ceramics International, 2016, 42, 9605-9612.	4.8	7
74	Simple and effective route to tailor the thermal, acoustic and hygrothermal properties of cork-containing waste derived inorganic polymer composites. Journal of Building Engineering, 2021, 42, 102501.	3.4	7
75	Organic functionalization of carbon nanofibers for composite applications. Polymer Composites, 2010, 31, 369-376.	4.6	6
76	Immobilization of Hazardous Wastes on One-Part Blast Furnace Slag-Based Geopolymers. Sustainability, 2021, 13, 13455.	3.2	6
77	Valorisation of industrial iron oxide waste to produce magnetic barium hexaferrite. ChemistrySelect, 2016, 1, 819-825.	1.5	5
78	Design guidelines for titania-silica-alumina ceramics with tuned anatase to rutile transformation. Ceramics International, 2019, 45, 5179-5188.	4.8	5
79	Role of waste-based geopolymer spheres addition for pH control and efficiency enhancement of anaerobic digestion process. Bioprocess and Biosystems Engineering, 2021, 44, 1167-1183.	3.4	5
80	Controlling efflorescence in geopolymers: A new approach. Case Studies in Construction Materials, 2021, 15, e00740.	1.7	5
81	Synthesis of red mud derived M-type barium hexaferrites with tuneable coercivity. Ceramics International, 2020, 46, 5757-5764.	4.8	3
82	The Role of an Industrial Alkaline Wastewater in the Alkali Activation of Biomass Fly Ash. Applied Sciences (Switzerland), 2022, 12, 3612.	2.5	3
83	Alumina/copper foams produced by replica using a double impregnation process. Advances in Applied Ceramics, 2017, 116, 85-91.	1.1	2
84	Quantitative mineralogical analysis of ceramic raw materials: An alternative approach. Journal of Materials Science Letters, 2001, 20, 1041-1042.	0.5	1
85	Mining tailing reuse in sulfobelitic clinker formulations. , 2015, , 183-188.		1
86	Cork derived TiO2 biomorphic ecoceramics. Open Ceramics, 2022, 9, 100243.	2.0	1
87	Lightweight Bi-Layered Ceramic Tiles for Novel Applications. Advances in Science and Technology, 2014, 91, 82-87.	0.2	0
88	Desenvolvimento de geopolÃmeros de baixa condutividade tÃ©rmica. Revista Materia, 2016, 21, 429-436.	0.2	0
89	DESENVOLVIMENTO DE BLOCO CELULAR CERÃ‚MICO USANDO PÃ“ DE ALUMÃNIO COMO AGENTE GERADOR DE POROS. Tecnologia Em Metalurgia, Materiais E Mineracao, 2018, 15, 377-383.	0.2	0
90	Evaluation of the Reactivity of Red Mud-Based Slags for Geopolymers Production. , 0, , .		0