Joseph Absi

List of Publications by Year
in descending order

67 papers	1,744 citations	361413 20 h-index	289244 40 g-index
67 all docs	67 docs citations	67 times ranked	1416 citing authors

#	Article	IF	Citations
1	Investigation of using municipal solid waste incineration fly ash as alternative aggregates replacement in hot mix asphalt. Road Materials and Pavement Design, 2023, 24, 1290-1309.	4.0	8
2	TSRST Heterogeneous Modeling for Understanding Failure Depending on Asphalt Mix Design and Experimental Conditions. RILEM Bookseries, 2022, , 1877-1883.	0.4	0
3	Fractional viscoelastic modeling of modified asphalt mastics using response surface method. Construction and Building Materials, 2022, 317, 125958.	7.2	11
4	Experimental and numerical investigation on the rheological behaviour of bituminous composites via DSR testing. Road Materials and Pavement Design, 2021, 22, S328-S344.	4.0	7
5	Experimental and Numerical Investigation of Sodium- and Potassium-Based Alkali Activator on the Mechanical Properties of Geopolymer-Mortars Using Lebanese Kaolin. International Journal of Civil Engineering, 2021, 19, 1007-1020.	2.0	6
6	An experimental length scale investigation on viscoelastic behavior of bituminous composites: Focusing on mortar scale. Construction and Building Materials, 2021, 308, 124766.	7.2	3
7	Micromechanical modeling of the interfacial zone in hot mix asphalt through use of a heterogeneous numerical method. European Journal of Environmental and Civil Engineering, 2020, 24, 1865-1880.	2.1	7
8	Modelling of asphalt mixes based on X-ray computed tomography and random heterogeneous generation. International Journal of Pavement Engineering, 2020, 21, 1626-1637.	4.4	8
9	Rupture of alumina coatings on C35 steel: A numerical simulation. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2020, 234, 1475-1489.	1.1	0
10	Assessment of aluminosilicate raw material used in <scp>L</scp> ebanon: Effect of curing. Material Design and Processing Communications, 2019, 1, e26.	0.9	3
11	Multiscale heterogeneous numerical simulation of asphalt mixture. Material Design and Processing Communications, 2019, 1, e42.	0.9	5
12	Mechanical Behavior of Polymer-Modified Bituminous Mastics. II: Numerical Approach. Journal of Materials in Civil Engineering, 2019, 31, .	2.9	14
13	A new method for bonding alumina to the alloy titanium-zirconium-molybdenum. Journal of the European Ceramic Society, 2018, 38, 2462-2466.	5.7	4
14	Micromechanical modelling of bituminous materialsâ€™ complex modulus at different length scales. International Journal of Pavement Engineering, 2018, 19, 685-696.	4.4	14
15	Effect of thermal treatment of a clay-based raw material on porosity and thermal conductivity: experimental approach, image processing and numerical simulation. European Journal of Environmental and Civil Engineering, 2017, 21, 1270-1284.	2.1	4
16	Determination of the polymerization degree of various alkaline solutions: Raman investigation. Journal of Sol-Gel Science and Technology, 2017, 83, 1-11.	2.4	17
17	Mechanical and electrical properties of a polyester resin reinforced with clay-based fillers. Journal of Mechanical Science and Technology, 2017, 31, 1151-1156.	1.5	1
18	Modelling self-heating and thixotropy phenomena under the cyclic loading of asphalt. Road Materials and Pavement Design, 2017, 18, 155-163.	4.0	14

#	Article	IF	Citations
19	Quantification of self-heating and its effects under cyclic tests on a bituminous binder. International Journal of Fatigue, 2017, 104, 334-341.	5.7	19
20	Experimental and numerical study of a modified ASTM C633 adhesion test for strongly-bonded coatings. Journal of Mechanical Science and Technology, 2017, 31, 3241-3247.	1.5	5
21	Coating of unreactive and reactive surfaces by aluminosilicate binder. Ceramics International, 2017, 43, 1819-1829.	4.8	8
22	Controlling the reactivity of silicate solutions: A FTIR, Raman and NMR study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 503, 101-109.	4.7	77
23	How to counteract the low reactivity of an alkaline solution. Journal of Non-Crystalline Solids, 2016, 452, 220-230.	3.1	5
24	Numerical simulation of local temperature evolution in bituminous materials under cyclic loading. European Journal of Environmental and Civil Engineering, 2016, 20, 1214-1232.	2.1	7
25	Formulation of new materials based on geopolymer binders and different road aggregates. Ceramics International, 2015, 41, 5812-5820.	4.8	20
26	Effect of the addition of ammonium molybdate on metakaolin-based geopolymer formation: Shrinkage and crystallization. Powder Technology, 2015, 275, 211-219.	4.2	16
27	Numerical finite element formulation of the 3D linear viscoelastic material model: Complex Poisson's ratio of bituminous mixtures. Archives of Civil and Mechanical Engineering, 2015, 15, 1138-1148.	3.8	9
28	Mechanical characterization of alumina coatings on C35 steel. Surface and Coatings Technology, 2015, 276, 677-685.	4.8	9
29	Analytical estimation of skeleton thermal conductivity of a geopolymer foam from thermal conductivity measurements. European Physical Journal: Special Topics, 2015, 224, 1715-1723.	2.6	7
30	Addition of Ammonium Molybdate in Geopolymer Formulation. Advances in Science and Technology, 2014, 92, 8-13.	0.2	2
31	Analytical and numerical identification of the skeleton thermal conductivity of a geopolymer foam using a multi-scale analysis. Computational Materials Science, 2014, 82, 264-273.	3.0	19
32	J-integral evaluation in cracked wood specimen using the mark tracking method. Wood Science and Technology, 2013, 47, 257-267.	3.2	14
33	Investigation into the impact of the use of 2D/3D digital models on the numerical calculation of the bituminous compositesâ€™ complex modulus. Computational Materials Science, 2013, 79, 377-389.	3.0	23
34	Potassium geopolymer foams made with silica fume pore forming agent for thermal insulation. Journal of Porous Materials, 2013, 20, 37-46.	2.6	78
35	Heterogeneous numerical modeling of asphalt concrete through use of a biphasic approach: Porous matrix/inclusions. Computational Materials Science, 2013, 69, 186-196.	3.0	55
36	Mixed mode fracture properties characterization for wood by Digital Images Correlation and Finite Element Method coupling. Engineering Fracture Mechanics, 2013, 105, 86-100.	4.3	40

#	Article	IF	Citations
37	Two-dimensional/three-dimensional biphasic modelling of the dynamic modulus of bituminous materials. European Journal of Environmental and Civil Engineering, 2013, 17, 430-443.	2.1	17
38	Characterization of mixed-mode fracture based on a complementary analysis by means of full-field optical and finite element approaches. International Journal of Fracture, 2013, 180, 41-52.	2.2	31
39	Youngâ€™s modulus evolution with temperature of glass/andalusite model materials: Experimental and numerical approach. Computational Materials Science, 2012, 55, 44-53.	3.0	3
40	Characterization of timber fracture using the Digital Image Correlation technique and Finite Element Method. Engineering Fracture Mechanics, 2012, 96, 107-121.	4.3	30
41	Finite Element Modeling of the Different Failure Mechanisms of a Plasma Sprayed Thermal Barrier Coatings System. Journal of Thermal Spray Technology, 2012, 21, 1234-1244.	3.1	72
42	Porosity control of cold consolidated geomaterial foam: Temperature effect. Ceramics International, 2012, 38, 77-84.	4.8	48
43	Crack propagation modeling on the interfaces of thermal barrier coating system with different thickness of the oxide layer and different interface morphologies. Materials & Design, 2011, 32, 4961-4969.	5.1	88
44	Identification algorithm for fracture parameters by combining DIC and FEM approaches. International Journal of Fracture, 2011, 170, 101-114.	2.2	39
45	Impact of the non-homogenous temperature distribution and the coatings process modeling on the thermal barrier coatings system. Materials & Design, 2011, 32, 728-735.	5.1	85
46	Effect of Residual Stresses and Prediction of Possible Failure Mechanisms on Thermal Barrier Coating System by Finite Element Method. Journal of Thermal Spray Technology, 2010, 19, 1054-1061.	3.1	51
47	Simulation of the effect of material properties and interface roughness on the stress distribution in thermal barrier coatings using finite element method. Materials & Design, 2010, 31, 772-781.	5.1	205
48	Evaluation of Mixed-mode Integral Invariant for Polymer Material Trough The Couple Experimental-Numerical Process. EPJ Web of Conferences, 2010, 6, 31007.	0.3	3
49	A finite element analysis for the mixed mode crack growth in a viscoelastic and orthotropic medium. International Journal of Solids and Structures, 2009, 46, 3548-3555.	2.7	11
50	Experimental and numerical study of the Youngâ€™s modulus vs temperature for heterogeneous model materials with polygonal inclusions. Computational Materials Science, 2009, 46, 996-1001.	3.0	9
51	Microcracks with unexpected characteristics induced by CTE mismatch in two-phase model materials. Journal of Materials Science, 2008, 43, 330-337.	3.7	3
52	Evolution of Thermophysical Characteristics in Tin Oxide: From Pressed Powder Compact to Fired Porous Body. Journal of the American Ceramic Society, 2008, 91, 965-969.	3.8	5
53	Experimental and numerical study of the elastic modulus vs temperature of debonded model materials. Computational Materials Science, 2008, 44, 826-831.	3.0	23
54	Experimental and numerical study of the room temperature elastic modulus of model materials with partly bonded matrix/particles interfaces. Computational Materials Science, 2007, 39, 267-273.	3.0	20

#	Article	IF	Citations
55	Preparation and thermal conductivity characterisation of highly porous ceramics. Journal of the European Ceramic Society, 2007, 27, 1345-1350.	5.7	50
56	Experimental and numerical study of the thermomechanical behaviour of refractory model materials. Journal of the European Ceramic Society, 2007, 27, 1513-1520.	5.7	15
57	Thermal conductivity of pressed powder compacts: tin oxide and alumina. Journal of the European Ceramic Society, 2007, 27, 475-478.	5.7	43
58	Use of cylindrical samples for ceramics strength measurements. Mecanique Et Industries, 2006, 7, 241-249.	0.2	0
59	Numerical calculations of the thermal conductivity of porous ceramics based on micrographs. Journal of the European Ceramic Society, 2006, 26, 2669-2676.	5.7	40
60	Thermal conductivity of highly porous zirconia. Journal of the European Ceramic Society, 2006, 26, 3567-3574.	5.7	227
61	Thermal response of two-layer systems:. Journal of the European Ceramic Society, 2005, 25, 367-373.	5.7	11
62	Improved method for severe thermal shocks testing of ceramics by water quenching. Journal of the European Ceramic Society, 2004, 24, 2835-2838.	5.7	35
63	Grain-boundary thermal resistance in polycrystalline oxides: alumina, tin oxide, and magnesia. High Temperatures - High Pressures, 2003, 35/36, 93-99.	0.3	34
64	Numerical separation of bi-modal strength distributions. Journal of the European Ceramic Society, 2002, 22, 593-601.	5.7	5
65	Characterization of Wood Fracture Using Optical Full Field Methods. Advanced Materials Research, 0, 778, 440-447.	0.3	0
66	TSRST heterogeneous modelling for investigating failure depending on asphalt mix design and experimental conditions. Road Materials and Pavement Design, 0, , 1-16.	4.0	1
67	Effective volume filling ratio of siliceous fillers within bituminous composites: experimental and micromechanical modelling. Road Materials and Pavement Design, 0, , 1-25.	4.0	1