

Raja Rizwan Hussain

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6162600/publications.pdf>

Version: 2024-02-01

54
papers

1,060
citations

393982

19
h-index

433756

31
g-index

56
all docs

56
docs citations

56
times ranked

763
citing authors

#	ARTICLE	IF	CITATIONS
1	Corrosion performance of hot-dip galvanized zinc-aluminum coated steel rebars in comparison to the conventional pure zinc coated rebars in concrete environment. <i>Construction and Building Materials</i> , 2021, 274, 121921.	3.2	44
2	Quantitative Non-Linear Effect of High Ambient Temperature on Chloride Threshold Value for Steel Reinforcement Corrosion in Concrete under Extreme Boundary Conditions. <i>Materials</i> , 2021, 14, 7595.	1.3	2
3	Corrosion characteristics of vanadium micro-alloyed steel reinforcement bars exposed in concrete environments and industrially polluted atmosphere. <i>Cement and Concrete Composites</i> , 2020, 113, 103728.	4.6	22
4	Electro-chemical investigation for the effect of rebar source and surface condition on the corrosion rate of reinforced concrete structures under varying corrosive environments. <i>Construction and Building Materials</i> , 2020, 244, 118317.	3.2	18
5	Global sensitivity analysis of certain and uncertain factors for a circular tunnel under seismic action. <i>Frontiers of Structural and Civil Engineering</i> , 2019, 13, 1289-1300.	1.2	6
6	Effects of Temperature and Stress on Creep Behavior of PP and Hybrid Fiber Reinforced Reactive Powder Concrete. <i>International Journal of Concrete Structures and Materials</i> , 2019, 13, .	1.4	14
7	Sodium Phosphate Post-treatment on Al Coating: Morphological and Corrosion Study. <i>Journal of Thermal Spray Technology</i> , 2019, 28, 1511-1531.	1.6	9
8	Corrosion mechanism and kinetics of Al-Zn coating deposited by arc thermal spraying process in saline solution at prolong exposure periods. <i>Scientific Reports</i> , 2019, 9, 3399.	1.6	43
9	Creep behavior of steel fiber reinforced reactive powder concrete at high temperature. <i>Construction and Building Materials</i> , 2019, 205, 321-331.	3.2	28
10	Prediction meta-models for the responses of a circular tunnel during earthquakes. <i>Underground Space (China)</i> , 2019, 4, 31-47.	3.4	9
11	Effect of Fibers on High-Temperature Mechanical Behavior and Microstructure of Reactive Powder Concrete. <i>Materials</i> , 2019, 12, 329.	1.3	55
12	Coupled effect of coarse aggregate and micro-silica on the relation between strength and elasticity of high performance concrete. <i>Construction and Building Materials</i> , 2018, 175, 321-332.	3.2	2
13	High temperature and residual properties of reactive powder concrete "A review. <i>Construction and Building Materials</i> , 2017, 147, 339-351.	3.2	160
14	Impact assessment of rainfall-vegetation on sedimentation and predicting erosion-prone region by GIS and RS. <i>Geomatics, Natural Hazards and Risk</i> , 2016, 7, 667-679.	2.0	6
15	Significance of oxygen concentration on the quality of passive film formation for steel reinforced concrete structures during the initial curing of concrete. <i>Cement and Concrete Composites</i> , 2016, 65, 171-176.	4.6	27
16	Accelerated Rusting of Reinforcing Bars: The Role of Manganese Alloying in Concrete Reinforcement Steel Bars. <i>ACI Materials Journal</i> , 2016, 113, .	0.3	1
17	Passive film formation and corrosion initiation in lightweight concrete structures as compared to self compacting and ordinary concrete structures at elevated temperature in chloride rich marine environment. <i>Construction and Building Materials</i> , 2015, 78, 144-152.	3.2	20
18	Investigation for the impact of nature of coarse aggregate on the passive layer formation and corresponding corrosion of reinforcement bars in high performance concrete. <i>Construction and Building Materials</i> , 2015, 100, 52-62.	3.2	8

#	ARTICLE	IF	CITATIONS
19	Incorporation preference for rubber-steel bearing isolation in retrofitting existing multi storied building. Computers and Concrete, 2015, 16, 503-529.	0.7	1
20	Mechanism of Nucleation and Growth of Passive Film on Steel Reinforcing Bar at Different Durations of its Exposure in Concrete Pore Solution at Nanoscale. ACI Materials Journal, 2015, 112, .	0.3	6
21	Economical-Structural Performance of Steel Moment Resisting Building Frames Using the Section Variation Technique. Revista De La Construccion, 2014, 13, 41-46.	0.5	2
22	Modeling of Corrosion; Steel, Concrete and Environment. Journal of Civil & Environmental Engineering, 2014, 04, .	0.1	0
23	EFFICIENT DESIGN IN BUILDING CONSTRUCTION WITH RUBBER BEARING IN MEDIUM RISK SEISMICITY: CASE STUDY AND ASSESSMENT. Journal of Civil Engineering and Management, 2014, 20, 621-631.	1.9	4
24	PARALLEL FRAMEWORK FOR EARTHQUAKE INDUCED RESPONSE COMPUTATION OF THE SDOF STRUCTURE. Journal of Civil Engineering and Management, 2014, 20, 477-484.	1.9	1
25	Time-dependent variation of the electrochemical impedance for thermo-mechanically treated versus plain low alloy steel rebars in contact with simulated concrete pore solution. Construction and Building Materials, 2014, 73, 283-288.	3.2	23
26	Role of Manganese Sulfide Inclusions in Steel Rebar in the Formation and Breakdown of Passive Films in Concrete Pore Solutions. Corrosion, 2014, 70, 74-86.	0.5	28
27	Repair Vulnerability of Corrosion Patch Repairs at the Steel Intersection Areas of Reinforced Concrete Slabs Influenced by Harsh Weather. Industrial & Engineering Chemistry Research, 2014, 53, 2656-2660.	1.8	2
28	Effect of Simulated Concrete Pore Solution Chemistry, Chloride Ions, and Temperature on Passive Layer Formed on Steel Reinforcement. ACI Materials Journal, 2014, 111, .	0.3	11
29	Computer based estimation of backbone curves for hysteretic Response of reinforced concrete columns under static cyclic lateral loads. Computers and Concrete, 2014, 14, 193-209.	0.7	1
30	Optimum structural modelling for tall buildings. Structural Design of Tall and Special Buildings, 2013, 22, 1173-1185.	0.9	8
31	Three-dimensional computer-aided finite element method retrofitting modeling and non-destructive testing techniques for the assessment of actual existing high-rise fire-damaged reinforced concrete building. Structural Design of Tall and Special Buildings, 2013, 22, 927-940.	0.9	3
32	Nonlinear dynamically automated excursions for rubber-steel bearing isolation in multi-storey construction. Automation in Construction, 2013, 30, 265-275.	4.8	27
33	Comparative study on induced macrocell corrosion phenomenon in repaired ordinary reinforced and self-compacting concrete structures. Corrosion Engineering Science and Technology, 2013, 48, 370-379.	0.7	3
34	Bond behaviour of high-strength concrete flexural member under low cyclic fatigue loading. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 602-613.	1.7	3
35	Non-linear FEM analysis of seismic induced pounding between neighbouring multi-storey structures. Latin American Journal of Solids and Structures, 2013, 10, 921-939.	0.6	27
36	Computer based FEM stabilization of oxygen transport model for material and energy simulation in corroding reinforced concrete. Computers and Concrete, 2013, 12, 669-680.	0.7	2

#	ARTICLE	IF	CITATIONS
37	Multivariable Empirical Analysis of Coupled Oxygen and Moisture for Potential and Rate of Quantitative Corrosion in Concrete. <i>Journal of Materials in Civil Engineering</i> , 2012, 24, 950-958.	1.3	10
38	Fiber-reinforced concrete incorporating locally available natural fibers in normal- and high-strength concrete and a performance analysis with steel fiber-reinforced composite concrete. <i>Journal of Composite Materials</i> , 2012, 46, 111-122.	1.2	52
39	Investigation of severe corrosion observed at intersection points of steel rebar mesh in reinforced concrete construction. <i>Construction and Building Materials</i> , 2012, 37, 67-81.	3.2	18
40	Coupled effect of ambient high relative humidity and varying temperature marine environment on corrosion of reinforced concrete. <i>Construction and Building Materials</i> , 2012, 28, 670-679.	3.2	45
41	Non-linear time domain analysis of base isolated multi-storey building under site specific bi-directional seismic loading. <i>Automation in Construction</i> , 2012, 22, 554-566.	4.8	42
42	Corrosion in RC construction under chloride and hot weather. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2011, 164, 191-198.	0.7	1
43	Underwater half-cell corrosion potential bench mark measurements of corroding steel in concrete influenced by a variety of material science and environmental engineering variables. <i>Measurement: Journal of the International Measurement Confederation</i> , 2011, 44, 274-280.	2.5	24
44	Computer-aided oxygen transport model of mass and energy simulation for corrosion of reinforced steel. <i>Automation in Construction</i> , 2011, 20, 559-570.	4.8	14
45	Investigation of volumetric effect of coarse aggregate on corroding steel reinforcement at the interfacial transition zone of concrete. <i>KSCE Journal of Civil Engineering</i> , 2011, 15, 153-160.	0.9	14
46	Effect of moisture variation on oxygen consumption rate of corroding steel in chloride contaminated concrete. <i>Cement and Concrete Composites</i> , 2011, 33, 154-161.	4.6	45
47	Enhanced electro-chemical corrosion model for reinforced concrete under severe coupled action of chloride and temperature. <i>Construction and Building Materials</i> , 2011, 25, 1305-1315.	3.2	64
48	Influence of chloride ions and hot weather on isolated rusting steel bar in concrete based on NDT and electro-chemical model evaluation. <i>NDT and E International</i> , 2011, 44, 158-162.	1.7	17
49	Experimental investigation of time dependent non-linear 3D relationship between critical carbonation depth and corrosion of steel in carbonated concrete. <i>Corrosion Engineering Science and Technology</i> , 2011, 46, 657-660.	0.7	7
50	Enhanced mass balance Tafel slope model for computer based FEM computation of corrosion rate of steel reinforced concrete coupled with CO ₂ transport. <i>Computers and Concrete</i> , 2011, 8, 177-192.	0.7	4
51	Induced macro-cell corrosion phenomenon in the simulated repaired reinforced concrete patch. <i>Australian Journal of Civil Engineering</i> , 2010, 8, 53-60.	0.6	7
52	Development of numerical model for FEM computation of oxygen transport through porous media coupled with micro-cell corrosion model of steel in concrete structures. <i>Computers and Structures</i> , 2010, 88, 639-647.	2.4	25
53	Influence of connectivity of concrete pores and associated diffusion of oxygen on corrosion of steel under high humidity. <i>Construction and Building Materials</i> , 2010, 24, 1014-1019.	3.2	43
54	Novel Approach Towards Calculation of Averaged Activation Energy Based on Arrhenius Plot for Predicting the Effect of Temperature on Chloride Induced Corrosion of Steel in Concrete. <i>Journal of ASTM International</i> , 2010, 7, 1-8.	0.2	2