

Rayed Al Yousef

List of Publications by Year in descending order

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133
papers

5,487
citations

87888

38
h-index

98798

67
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141
all docs

141
docs citations

141
times ranked

2706
citing authors

#	ARTICLE	IF	CITATIONS
1	Clean production and properties of geopolymers concrete; A review. Journal of Cleaner Production, 2020, 251, 119679.	9.3	442
2	Properties and utilizations of waste tire rubber in concrete: A review. Construction and Building Materials, 2019, 224, 711-731.	7.2	239
3	Properties and applications of FRP in strengthening RC structures: A review. Structures, 2018, 16, 208-238.	3.6	206
4	Predictive modeling for sustainable high-performance concrete from industrial wastes: A comparison and optimization of models using ensemble learners. Journal of Cleaner Production, 2021, 292, 126032.	9.3	204
5	Strengthening of reinforced concrete beams by using fiber-reinforced polymer composites: A review. Journal of Building Engineering, 2019, 25, 100798.	3.4	168
6	Use of recycled plastic as fine aggregate in cementitious composites: A review. Construction and Building Materials, 2020, 253, 119146.	7.2	163
7	A Comparative Study of Random Forest and Genetic Engineering Programming for the Prediction of Compressive Strength of High Strength Concrete (HSC). Applied Sciences (Switzerland), 2020, 10, 7330.	2.5	145
8	Eco-friendly concrete containing recycled plastic as partial replacement for sand. Journal of Materials Research and Technology, 2020, 9, 4631-4643.	5.8	140
9	Prediction of Compressive Strength of Fly Ash Based Concrete Using Individual and Ensemble Algorithm. Materials, 2021, 14, 794.	2.9	130
10	Performances, challenges and opportunities in strengthening reinforced concrete structures by using FRPs – A state-of-the-art review. Engineering Failure Analysis, 2020, 111, 104480.	4.0	128
11	Renewable and sustainable energy production in Saudi Arabia according to Saudi Vision 2030; Current status and future prospects. Journal of Cleaner Production, 2020, 247, 119602.	9.3	119
12	Applications of Gene Expression Programming and Regression Techniques for Estimating Compressive Strength of Bagasse Ash based Concrete. Crystals, 2020, 10, 737.	2.2	109
13	Geopolymer concrete as sustainable material: A state of the art review. Construction and Building Materials, 2021, 306, 124762.	7.2	109
14	Effect of Coconut Fiber Length and Content on Properties of High Strength Concrete. Materials, 2020, 13, 1075.	2.9	101
15	Waste ceramic as low cost and eco-friendly materials in the production of sustainable mortars. Journal of Cleaner Production, 2020, 266, 121825.	9.3	100
16	Applications of Gene Expression Programming for Estimating Compressive Strength of High-Strength Concrete. Advances in Civil Engineering, 2020, 2020, 1-23.	0.7	97
17	New Prediction Model for the Ultimate Axial Capacity of Concrete-Filled Steel Tubes: An Evolutionary Approach. Crystals, 2020, 10, 741.	2.2	87
18	Recycling of rice husk waste for a sustainable concrete: A critical review. Journal of Cleaner Production, 2021, 312, 127734.	9.3	77

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19	Compressive Strength of Fly-Ash-Based Geopolymer Concrete by Gene Expression Programming and Random Forest. <i>Advances in Civil Engineering</i> , 2021, 2021, 1-17.	0.7	74
20	The Utilization of Recycled Aggregate in High Performance Concrete: A Review. <i>Journal of Materials Research and Technology</i> , 2020, 9, 8469-8481.	5.8	72
21	3D-printed concrete: applications, performance, and challenges. <i>Journal of Sustainable Cement-Based Materials</i> , 2020, 9, 127-164.	3.1	68
22	Sugarcane bagasse ash-based engineered geopolymer mortar incorporating propylene fibers. <i>Journal of Building Engineering</i> , 2021, 33, 101492.	3.4	66
23	Geopolymer Concrete Compressive Strength via Artificial Neural Network, Adaptive Neuro Fuzzy Interface System, and Gene Expression Programming With K-Fold Cross Validation. <i>Frontiers in Materials</i> , 2021, 8, .	2.4	59
24	Potential use of recycled plastic and rubber aggregate in cementitious materials for sustainable construction: A review. <i>Journal of Cleaner Production</i> , 2021, 329, 129736.	9.3	58
25	Synergistic effects of fly ash and hooked steel fibers on strength and durability properties of high strength recycled aggregate concrete. <i>Resources, Conservation and Recycling</i> , 2021, 168, 105444.	10.8	56
26	Effect of Varying Steel Fiber Content on Strength and Permeability Characteristics of High Strength Concrete with Micro Silica. <i>Materials</i> , 2020, 13, 5739.	2.9	53
27	Waste Glass in Cement and Geopolymer Concretes: A Review on Durability and Challenges. <i>Polymers</i> , 2021, 13, 2071.	4.5	53
28	State-of-the-art-review on rice husk ash: A supplementary cementitious material in concrete. <i>Journal of King Saud University, Engineering Sciences</i> , 2021, 33, 294-307.	2.0	48
29	A Step towards Sustainable Self-Compacting Concrete by Using Partial Substitution of Wheat Straw Ash and Bentonite Clay Instead of Cement. <i>Sustainability</i> , 2021, 13, 824.	3.2	47
30	Performance properties of structural fibred-foamed concrete. <i>Results in Engineering</i> , 2020, 5, 100092.	5.1	45
31	Utilization of sheep wool as potential fibrous materials in the production of concrete composites. <i>Journal of Building Engineering</i> , 2020, 30, 101216.	3.4	44
32	Drying shrinkage and creep properties of prepacked aggregate concrete reinforced with waste polypropylene fibers. <i>Journal of Building Engineering</i> , 2020, 32, 101522.	3.4	43
33	Durability and mechanical properties of seashell partially-replaced cement. <i>Journal of Building Engineering</i> , 2020, 31, 101328.	3.4	42
34	PERFORMANCE OF SUSTAINABLE GREEN CONCRETE INCORPORATED WITH FLY ASH, RICE HUSK ASH, AND STONE DUST. <i>Acta Polytechnica</i> , 2021, 61, 279-291.	0.6	42
35	Simulation of ultra-high-performance concrete mixed with hematite and barite aggregates using Monte Carlo for dry cask storage. <i>Construction and Building Materials</i> , 2020, 263, 120161.	7.2	40
36	Sustainable Use of Waste Polypropylene Fibers and Palm Oil Fuel Ash in the Production of Novel Prepacked Aggregate Fiber-Reinforced Concrete. <i>Sustainability</i> , 2020, 12, 4871.	3.2	40

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37	Flexural behavior of RC beams strengthened with steel wire mesh and self-compacting concrete jacketing – experimental investigation and test results. Journal of Materials Research and Technology, 2021, 10, 1002-1019.	5.8	40
38	Performance of sustainable concrete containing different types of recycled plastic. Journal of Cleaner Production, 2021, 328, 129517.	9.3	40
39	Characteristic compressive strength correlation of rubberized concrete interlocking masonry wall. Structures, 2020, 26, 169-184.	3.6	39
40	Performance evaluation of high-strength concrete reinforced with basalt fibers exposed to elevated temperatures. Journal of Building Engineering, 2021, 35, 102108.	3.4	38
41	Prediction of Compressive Strength of Rice Husk Ash Concrete through Different Machine Learning Processes. Crystals, 2021, 11, 352.	2.2	38
42	Low-velocity impact, resonance, and frequency responses of FG-GPLRC viscoelastic doubly curved panel. Composite Structures, 2021, 269, 114000.	5.8	38
43	Effects of Waste Ceramic as Cement and Fine Aggregate on Durability Performance of Sustainable Mortar. Arabian Journal for Science and Engineering, 2020, 45, 3623-3634.	3.0	37
44	Enhancement of strength and transport properties of a novel preplaced aggregate fiber reinforced concrete by adding waste polypropylene carpet fibers. Journal of Building Engineering, 2020, 27, 101003.	3.4	36
45	Evaluating mechanical properties and impact resistance of modified concrete containing ground Blast Furnace slag and discarded rubber tire crumbs. Construction and Building Materials, 2021, 295, 123603.	7.2	36
46	Experimental Investigation of NaOH and KOH Mixture in SCBA-Based Geopolymer Cement Composite. Materials, 2020, 13, 3437.	2.9	33
47	Engineering Properties of Waste Sawdust-Based Lightweight Alkali-Activated Concrete: Experimental Assessment and Numerical Prediction. Materials, 2020, 13, 5490.	2.9	32
48	A comparative study on performance evaluation of hybrid GNPs/CNTs in conventional and self-compacting mortar. AEJ - Alexandria Engineering Journal, 2020, 59, 369-379.	6.4	32
49	Performance investigation of high-proportion Saudi-fly-ash-based concrete. Results in Engineering, 2020, 6, 100118.	5.1	31
50	Creep and drying shrinkage performance of concrete composite comprising waste polypropylene carpet fibres and palm oil fuel ash. Journal of Building Engineering, 2020, 30, 101250.	3.4	30
51	Performance Evaluation of Soft Computing for Modeling the Strength Properties of Waste Substitute Green Concrete. Sustainability, 2021, 13, 2867.	3.2	29
52	Mathematical prediction of the compressive strength of bacterial concrete using gene expression programming. Ain Shams Engineering Journal, 2021, 12, 3629-3639.	6.1	29
53	Development of a sustainable concrete incorporated with effective microorganism and fly Ash: Characteristics and modeling studies. Construction and Building Materials, 2021, 285, 122899.	7.2	28
54	Evaluation of Mechanical and Permeability Characteristics of Microfiber-Reinforced Recycled Aggregate Concrete with Different Potential Waste Mineral Admixtures. Materials, 2021, 14, 5933.	2.9	27

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55	Performance of Foundry Sand Concrete under Ambient and Elevated Temperatures. <i>Materials</i> , 2019, 12, 2645.	2.9	25
56	Durability and thermal properties of prepacked aggregate concrete reinforced with waste polypropylene fibers. <i>Journal of Building Engineering</i> , 2020, 32, 101723.	3.4	23
57	Mechanics-based approach for predicting the short-term deflection of CFRP plated RC beams. <i>Composite Structures</i> , 2019, 225, 111169.	5.8	22
58	Mechanical Effect of Steel Fiber on the Cement Replacement Materials of Self-Compacting Concrete. <i>Fibers</i> , 2019, 7, 36.	4.0	22
59	Experimental Study of New Insulation Lightweight Concrete Block Floor Based on Perlite Aggregate, Natural Sand, and Sand Obtained from Marble Waste. <i>Advances in Materials Science and Engineering</i> , 2019, 2019, 1-14.	1.8	22
60	Investigating BIM Implementation Barriers and Issues in Pakistan Using ISM Approach. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7250.	2.5	22
61	Texture, morphology and strength performance of self-compacting alkali-activated concrete: Role of fly ash as GBFS replacement. <i>Construction and Building Materials</i> , 2021, 270, 121368.	7.2	22
62	Bio-inspired self-healing of concrete cracks using new <i>B. pseudomycooides</i> species. <i>Journal of Materials Research and Technology</i> , 2021, 12, 967-981.	5.8	22
63	Utilisation of waste marble powder as low-cost cementing materials in the production of mortar. <i>Journal of Building Engineering</i> , 2020, 32, 101642.	3.4	21
64	Properties and water penetration of structural concrete wrapped with CFRP. <i>Results in Engineering</i> , 2020, 5, 100094.	5.1	20
65	Flexural strength improvement in bamboo reinforced concrete beams subjected to pure bending. <i>Journal of Building Engineering</i> , 2020, 31, 101289.	3.4	20
66	Application of extreme learning machine in behavior of beam to column connections. <i>Structures</i> , 2020, 25, 861-867.	3.6	20
67	Towards Sustainable Concrete Composites through Waste Valorisation of Plastic Food Trays as Low-Cost Fibrous Materials. <i>Sustainability</i> , 2021, 13, 2073.	3.2	20
68	Mechanical and durability characteristics of sustainable concrete modified with partial substitution of waste foundry sand. <i>Structural Concrete</i> , 2021, 22, 2775-2790.	3.1	19
69	Mix design of concrete: Advanced particle packing model by developing and combining multiple frameworks. <i>Construction and Building Materials</i> , 2022, 320, 126218.	7.2	19
70	Flexural performance of wire mesh and geotextile-strengthened reinforced concrete beam. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	18
71	Effects of Incorporation of Marble Powder Obtained by Recycling Waste Sludge and Limestone Powder on Rheology, Compressive Strength, and Durability of Self-Compacting Concrete. <i>Advances in Materials Science and Engineering</i> , 2019, 2019, 1-15.	1.8	18
72	Computational parameter identification of strongest influence on the shear resistance of reinforced concrete beams by fiber reinforcement polymer. <i>Structures</i> , 2020, 27, 118-127.	3.6	18

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73	Study of the Effects of Marble Powder Amount on the Self-Compacting Concretes Properties by Microstructure Analysis on Cement-Marble Powder Pastes. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-13.	0.7	17
74	Performance evaluation of green mortar comprising ceramic waste as cement and fine aggregates replacement. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	15
75	Enhanced performance of nano-palm oil ash-based green mortar against sulphate environment. <i>Journal of Building Engineering</i> , 2020, 32, 101640.	3.4	15
76	Cracking behavior of sea sand RC beam bonded externally with CFRP plate. <i>Structures</i> , 2021, 33, 1578-1589.	3.6	15
77	Flexural strength of FRP plated RC beams using a partial-interaction displacement-based approach. <i>Structures</i> , 2019, 22, 405-420.	3.6	14
78	The Impact Resistance and Deformation Performance of Novel Pre-Packed Aggregate Concrete Reinforced with Waste Polypropylene Fibres. <i>Crystals</i> , 2020, 10, 788.	2.2	14
79	Enhanced Performance of Concrete Composites Comprising Waste Metalised Polypropylene Fibres Exposed to Aggressive Environments. <i>Crystals</i> , 2020, 10, 696.	2.2	14
80	Structural behavior of out-of-plane loaded precast lightweight EPS-foam concrete C-shaped slabs. <i>Journal of Building Engineering</i> , 2021, 33, 101597.	3.4	14
81	Synergistic effects of waste plastic food tray as low-cost fibrous materials and palm oil fuel ash on transport properties and drying shrinkage of concrete. <i>Journal of Building Engineering</i> , 2021, 42, 102826.	3.4	14
82	Synthesis of rubberized Alkali-activated Concrete: Experimental and numerical evaluation. <i>Construction and Building Materials</i> , 2021, 303, 124526.	7.2	14
83	Performance and failure analysis of carbon fiber-reinforced polymer (CFRP) strengthened reinforced concrete (RC) beams. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	13
84	Application of correlation analysis techniques to surface wave testing for the evaluation of reinforced concrete structural elements. <i>NDT and E International</i> , 2019, 102, 68-76.	3.7	13
85	Prediction of the flexural behavior of corroded concrete beams using combined method. <i>Structures</i> , 2020, 25, 1000-1008.	3.6	13
86	Self-Fibers Compacting Concrete Properties Reinforced with Propylene Fibers. <i>Science and Engineering of Composite Materials</i> , 2021, 28, 64-72.	1.4	13
87	Self-healing epoxy coating doped with <i>Elaeisis guineensis</i> /silver nanoparticles: A robust corrosion inhibitor. <i>Construction and Building Materials</i> , 2021, 312, 125396.	7.2	13
88	Effect of FRP Wrapping on Fatigue Bond Behavior of Spliced Concrete Beams. <i>Journal of Composites for Construction</i> , 2016, 20, .	3.2	12
89	Green and sustainable concrete production using carpet fibers waste and palm oil fuel ash. <i>Materials Today: Proceedings</i> , 2021, 39, 929-934.	1.8	12
90	Cross-laminated timber-concrete composite structural floor system: A state-of-the-art review. <i>Engineering Failure Analysis</i> , 2021, 130, 105766.	4.0	12

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91	Effect of recycled tyre steel fiber on flexural toughness, residual strength, and chloride permeability of high-performance concrete (HPC). <i>Journal of Sustainable Cement-Based Materials</i> , 2023, 12, 141-157.	3.1	12
92	Development of Ductile and Durable High Strength Concrete (HSC) through Interactive Incorporation of Coir Waste and Silica Fume. <i>Materials</i> , 2022, 15, 2616.	2.9	12
93	Crack growth modeling of tension lap spliced reinforced concrete beams strengthened with fibre reinforced polymer wrapping under fatigue loading. <i>Construction and Building Materials</i> , 2018, 166, 345-355.	7.2	11
94	Experimental and Theoretical Study of a New Technique for Mixing Self-Compacting Concrete with Marble Sludge Grout. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-11.	0.7	11
95	Durability performance of modified concrete incorporating fly ash and effective microorganism. <i>Construction and Building Materials</i> , 2021, 267, 120947.	7.2	11
96	Effects of incorporating wood sawdust on the firing program and the physical and mechanical properties of fired clay bricks. <i>Journal of Building Engineering</i> , 2021, 35, 102106.	3.4	11
97	Heat-Induced Spalling of Concrete: A Review of the Influencing Factors and Their Importance to the Phenomenon. <i>Materials</i> , 2022, 15, 1693.	2.9	11
98	Analytical mechanics solution for measuring the deflection of strengthened RC beams using FRP plates. <i>Case Studies in Construction Materials</i> , 2019, 11, e00272.	1.7	10
99	Effect of Alumina Nano-Particles on Physical and Mechanical Properties of Medium Density Fiberboard. <i>Materials</i> , 2020, 13, 4207.	2.9	10
100	Assessment of High Performance Self-Consolidating Concrete through an Experimental and Analytical Multi-Parameter Approach. <i>Materials</i> , 2021, 14, 985.	2.9	10
101	Performance Evaluation of Sustainable Concrete Comprising Waste Polypropylene Food Tray Fibers and Palm Oil Fuel Ash Exposed to Sulfate and Acid Attacks. <i>Crystals</i> , 2021, 11, 966.	2.2	10
102	Effects of Sulfate and Sulfuric Acid on Efficiency of Geopolymers as Concrete Repair Materials. <i>Gels</i> , 2022, 8, 53.	4.5	10
103	Enhanced acoustic properties of concrete composites comprising modified waste sheep wool fibers. <i>Journal of Building Engineering</i> , 2022, 56, 104815.	3.4	10
104	Effect of the thickness of concrete cover on the fatigue bond strength of GFRP wrapped and non-wrapped reinforced concrete beams containing a lap splice. <i>Structures</i> , 2016, 6, 1-8.	3.6	9
105	Sodium Phosphate Post-treatment on Al Coating: Morphological and Corrosion Study. <i>Journal of Thermal Spray Technology</i> , 2019, 28, 1511-1531.	3.1	9
106	Influence of slenderness ratio on the structural performance of lightweight foam concrete composite panel. <i>Case Studies in Construction Materials</i> , 2019, 10, e00226.	1.7	9
107	Effect of Sodium Phosphate and Calcium Nitrate Sealing Treatment on Microstructure and Corrosion Resistance of Wire Arc Sprayed Aluminum Coatings. <i>Coatings</i> , 2020, 10, 33.	2.6	9
108	Role of L-arginine on the formation and breakdown of passive film onto the steel rebars surface in chloride contaminated concrete pore solution. <i>Journal of Molecular Liquids</i> , 2021, 337, 116454.	4.9	9

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109	An Integrated Approach to Using Sheep Wool as a Fibrous Material for Enhancing Strength and Transport Properties of Concrete Composites. <i>Materials</i> , 2022, 15, 1638.	2.9	9
110	Dynamic attainment of mixed aspect ratio for concrete members reinforced with steel fiber under impact loading. <i>Mechanics of Advanced Materials and Structures</i> , 2022, 29, 1986-1995.	2.6	8
111	Green concrete composites production comprising metalized plastic waste fibers and palm oil fuel ash. <i>Materials Today: Proceedings</i> , 2021, 39, 911-916.	1.8	8
112	Performance evaluation of reinforced concrete beams with corroded web reinforcement: Experimental and theoretical study. <i>Journal of Building Engineering</i> , 2021, 35, 102038.	3.4	8
113	Elevated Temperature Performance of Reactive Powder Concrete Containing Recycled Fine Aggregates. <i>Materials</i> , 2020, 13, 3748.	2.9	7
114	Cold-Formed Steel Lipped Channel Section Columns Undergoing Local-Overall Buckling Interaction. <i>International Journal of Steel Structures</i> , 2021, 21, 408-429.	1.3	7
115	Consolidated effect of fiber-reinforcement and concrete strength class on mechanical performance, economy and footprint of concrete for pavement use. <i>Journal of King Saud University, Engineering Sciences</i> , 2021, , .	2.0	7
116	Fatigue Bond Stressâ€“Slip Behavior of Lap Splices in the Reinforcement of Unwrapped and FRP-Wrapped Concrete Beams. <i>Journal of Composites for Construction</i> , 2016, 20, 04016039.	3.2	6
117	Experimental Investigation of a New Ecological Block Made by Mixing Gypsum Plaster and Desert Sand. <i>Arabian Journal for Science and Engineering</i> , 2020, 45, 4037-4052.	3.0	6
118	Enhanced Acoustic Properties of a Novel Prepacked Aggregates Concrete Reinforced with Waste Polypropylene Fibers. <i>Materials</i> , 2022, 15, 1173.	2.9	6
119	A Review of the Combined Effect of Fibers and Nano Materials on the Technical Performance of Mortar and Concrete. <i>Sustainability</i> , 2022, 14, 3464.	3.2	6
120	Effect of elevated temperatures on properties of sustainable concrete composites incorporating waste metalized plastic fibres. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	5
121	Bond Behavior of Cleaned Corroded Lap Spliced Beams Repaired with Carbon Fiber Reinforced Polymer Sheets and Partial Depth Repairs. <i>Crystals</i> , 2020, 10, 1014.	2.2	5
122	Enduring performance of alkali-activated mortars with metakaolin as granulated blast furnace slag replacement. <i>Case Studies in Construction Materials</i> , 2022, 16, e00845.	1.7	5
123	Performance Evaluation of Pre-fabricated Footing Using Cold-Formed Steel of Lipped C-Channel Section. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 8225-8238.	3.0	4
124	Effects of limestone filler fineness on the rheological behavior of cement â€“ Limestone filler grouts. <i>Ain Shams Engineering Journal</i> , 2021, 12, 3569-3578.	6.1	4
125	Bituminous mineral compositions for paving with cullet. <i>Case Studies in Construction Materials</i> , 2020, 12, e00317.	1.7	2
126	RC beam strengthening using hinge and anchorage approach. <i>Results in Materials</i> , 2020, 5, 100047.	1.8	2

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127	Investigation of semi-supported steel plate shear walls with different infill plates under cyclic loading. Mechanics Based Design of Structures and Machines, 2023, 51, 740-763.	4.7	2
128	Morphological and corrosion studies of ammonium phosphate and caesium nitrate treated Al coating deposited by arc thermal spray process. Surfaces and Interfaces, 2021, 22, 100885.	3.0	2
129	Sustainable Use of Waste Polypropylene Fibres to Enhance the Abrasion and Skid Resistance of Two-Stage Concrete. Sustainability, 2021, 13, 5200.	3.2	2
130	A Review on the Performance of Concrete Containing Non-Potable Water. Applied Sciences (Switzerland), 2021, 11, 6729.	2.5	2
131	Production of sustainable mortar comprising waste ceramic nanoparticles. , 2020, , 559-581.		1
132	Applicable use of lightweight foam concrete composite sandwich panels as a flooring system. , 2019, , .		0
133	Development of new baked bricks based on clay and sawdust. MATEC Web of Conferences, 2018, 149, 01040.	0.2	0