Sarah Simko

List of Publications by Year
in descending order

68 papers	2,846 citations	172457 29 h-index	175258 52 g-index
68 all docs	68 docs citations	68 times ranked	2374 citing authors

#	Article	IF	Citations
1	Impact of UHPC Tensile Behavior on Steel Reinforced UHPC Flexural Behavior. Journal of Structural Engineering, 2022, 148, .	3.4	24
2	Impact of fiber distribution and cyclic loading on the bond behavior of steel-reinforced UHPC. Cement and Concrete Composites, 2022, 126, 104338.	10.7	30
3	Use of Crowdsourced Online Surveys to Study the Impact of Architectural and Design Choices on Wellbeing. Frontiers in Sustainable Cities, 2022, 4, .	2.4	6
4	Effect of bubble nucleating agents derived from biochar on the foaming mechanism of poly lactic acid foams. Applied Surface Science Advances, 2021, 3, 100059.	6.8	2
5	Impact of cyclic loading on longitudinally-reinforced UHPC flexural members with different fiber volumes and reinforcing ratios. Engineering Structures, 2021, 241, 112454.	5.3	32
6	Gradual Crushing of Steel Reinforced HPFRCC Beams: Experiments and Simulations. Journal of Structural Engineering, 2021, 147, .	3.4	25
7	Flexural performance of steel-reinforced engineered cementitious composites with different reinforcing ratios and steel types. Construction and Building Materials, 2020, 231, 117159.	7.2	23
8	Comparison of nanocrystalline cellulose dispersion versus surface nucleation in poly(3â€hydroxybutyrateâ€coâ€3â€hydroxyvalerate) crystallization. SPE Polymers, 2020, 1, 15-25.	3.3	1
9	Cost-effectiveness analysis of abiraterone, docetaxel or placebo plus androgen deprivation therapy for hormone-sensitive advanced prostate cancer. Einstein (Sao Paulo, Brazil), 2019, 17, eGS4414.	0.7	15
10	Predicting the two predominant flexural failure paths of longitudinally reinforced high-performance fiber-reinforced cementitious composite structural members. Engineering Structures, 2019, 199, 109581.	5.3	40
11	Mechanics and failure characteristics of hybrid fiber-reinforced concrete (HyFRC) composites with longitudinal steel reinforcement. Engineering Structures, 2019, 183, 243-254.	5.3	19
12	A lignin-epoxy resin derived from biomass as an alternative to formaldehyde-based wood adhesives. Green Chemistry, 2018, 20, 1459-1466.	9.0	182
13	Experimental Testing of Reinforced ECC Beams Subjected to Various Cyclic Deformation Histories. Journal of Structural Engineering, 2018, 144, .	3.4	18
14	Biocomposite Fiber-Matrix Treatments that Enhance In-Service Performance Can Also Accelerate End-of-Life Fragmentation and Anaerobic Biodegradation to Methane. Journal of Polymers and the Environment, 2018, 26, 1715-1726.	5.0	22
15	Integrating a Digital Textbook into a Statics Course. , 2018, , .		0
16	Simulation of Deformation Capacity in Reinforced High-Performance Fiber-Reinforced Cementitious Composite Flexural Members. Journal of Structural Engineering, 2018, 144, .	3.4	24
17	Methodology to assess end-of-life anaerobic biodegradation kinetics and methane production potential for composite materials. Composites Part A: Applied Science and Manufacturing, 2017, 95, 388-399.	7.6	12
18	Historical Analysis of Hydraulic Bridge Collapses in the Continental United States. Journal of Infrastructure Systems, 2017, 23, .	1.8	55

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19	Assessment of models for anaerobic biodegradation of a model bioplastic: Poly(hydroxybutyrate-co-hydroxyvalerate). Bioresource Technology, 2017, 227, 205-213.	9.6	29
20	Experimental testing of reinforced concrete and reinforced ECC flexural members subjected to various cyclic deformation histories. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	22
21	Bond behavior and interface modeling of reinforced high-performance fiber-reinforced cementitious composites. Cement and Concrete Composites, 2017, 83, 188-201.	10.7	56
22	Impact of Reinforcement Ratio and Loading Type on the Deformation Capacity of High-Performance Fiber-Reinforced Cementitious Composites Reinforced with Mild Steel. Journal of Structural Engineering, 2016, 142, .	3.4	56
23	Influence of carbon feedstock on potentially net beneficial environmental impacts of bio-based composites. Journal of Cleaner Production, 2016, 132, 266-278.	9.3	8
24	Bond behavior of steel reinforcement in high-performance fiber-reinforced cementitious composite flexural members. Materials and Structures/Materiaux Et Constructions, 2016, 49, 71-86.	3.1	93
25	Introduction: Special Issue on â€œBiobased Construction Materialsâ€•in the Journal of Renewable Materials. Journal of Renewable Materials, 2015, 3, 161-162.	2.2	0
26	Integrating durability-based service-life predictions with environmental impact assessments of natural fiberâ€“reinforced composite materials. Resources, Conservation and Recycling, 2015, 99, 72-83.	10.8	42
27	Static versus Time-Dependent Material Selection Charts and Application in Wood Flour Composites. Journal of Biobased Materials and Bioenergy, 2015, 9, 273-283.	0.3	7
28	Design Concepts for Controlled Rocking of Self-Centering Steel-Braced Frames. Journal of Structural Engineering, 2014, 140, .	3.4	150
29	Cyclic Response of Nonductile Reinforced Concrete Frames with Unreinforced Masonry Infills Retrofitted with Engineered Cementitious Composites. Journal of Structural Engineering, 2014, 140, .	3.4	43
30	Behavior of unreinforced masonry prisms and beams retrofitted with engineered cementitious composites. Materials and Structures/Materiaux Et Constructions, 2014, 47, 1573-1587.	3.1	18
31	Influence of temporal resolution and processing of exposure data on modeling of chloride ingress and reinforcement corrosion in concrete. Materials and Structures/Materiaux Et Constructions, 2014, 47, 729-748.	3.1	16
32	Tension stiffening in reinforced high performance fiber reinforced cement-based composites. Cement and Concrete Composites, 2014, 50, 36-46.	10.7	104
33	Mechanical characterization and modeling of poly (Î²â€hydroxybutyrate)â€coâ€poly(Î²â€hydroxyvalerate)â€“Alfa fiberâ€reinforced composites. Polymer Composites, 2014, 35, 1758-1766.	4.6	5
34	A modular framework for performance-based durability engineering: From exposure to impacts. Structural Safety, 2014, 50, 78-93.	5.3	16
35	Incorporating spatiotemporal effects and moisture diffusivity into a multi-criteria materials selection methodology for woodâ€“polymer composites. Construction and Building Materials, 2014, 71, 589-601.	7.2	14
36	Seismic Retrofit of Steel Moment-Resisting Frames with High-Performance Fiber-Reinforced Concrete Infill Panels: Large-Scale Hybrid Simulation Experiments. Journal of Structural Engineering, 2014, 140, .	3.4	26

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37	Nonlinear Constitutive Model for Anisotropic Biobased Composite Materials. Journal of Engineering Mechanics - ASCE, 2014, 140, .	2.9	7
38	A micromechanical model for moisture-induced deterioration in fully biorenewable woodâ€“plastic composites. Composites Part A: Applied Science and Manufacturing, 2013, 50, 81-92.	7.6	32
39	A Renewable Ligninâ€“Lactide Copolymer and Application in Biobased Composites. ACS Sustainable Chemistry and Engineering, 2013, 1, 1231-1238.	6.7	282
40	Application of multi-criteria material selection techniques to constituent refinement in biobased composites. Materials & Design, 2013, 52, 1043-1051.	5.1	15
41	Shake-Table Tests of a 3-Story Masonry-Infilled RC Frame Retrofitted with Composite Materials. Journal of Structural Engineering, 2013, 139, 1340-1351.	3.4	46
42	Improvement in environmental performance of poly(Î²-hydroxybutyrate)-co-(Î²-hydroxyvalerate) composites through process modifications. Journal of Cleaner Production, 2013, 40, 190-198.	9.3	17
43	Behavior of Concrete and ECC Structures under Simulated Earthquake Motion. Journal of Structural Engineering, 2013, 139, 389-399.	3.4	30
44	Evaluation of Functional Units Including Time-Dependent Properties for Environmental Impact Modeling of Biobased Composites. Journal of Biobased Materials and Bioenergy, 2013, 7, 588-599.	0.3	2
45	Simulation of Unreinforced Masonry Beams Retrofitted with Engineered Cementitious Composites in Flexure. Journal of Materials in Civil Engineering, 2012, 24, 506-515.	2.9	27
46	Characterizing the effects of ambient aging on the mechanical and physical properties of two commercially available bacterial thermoplastics. Polymer Degradation and Stability, 2012, 97, 1922-1929.	5.8	58
47	Extruded foams from microbial poly(3â€hydroxybutyrateâ€coâ€3â€hydroxyvalerate) and its blends with cellulose acetate butyrate. Polymer Engineering and Science, 2012, 52, 1495-1508.	3.1	30
48	Moisture diffusion and its impact on uniaxial tensile response of biobased composites. Composites Part B: Engineering, 2012, 43, 2303-2312.	12.0	51
49	Mechanisms and impact of fiberâ€“matrix compatibilization techniques on the material characterization of PHBV/oak wood flour engineered biobased composites. Composites Science and Technology, 2012, 72, 708-715.	7.8	111
50	Characterization of poly-hydroxybutyrate films and hemp fiber reinforced composites exposed to accelerated weathering. Polymer Degradation and Stability, 2012, 97, 870-878.	5.8	65
51	Modeling the kinetics of water transport and hydroexpansion in a lignocellulose-reinforced bacterial copolyester. Polymer, 2012, 53, 2152-2161.	3.8	43
52	Mechanical response of PHB- and cellulose acetate natural fiber-reinforced composites for construction applications. Composites Part B: Engineering, 2011, 42, 1920-1928.	12.0	74
53	Strain rate dependence of HPFRCC cylinders in monotonic tension. Materials and Structures/Materiaux Et Constructions, 2011, 44, 391-404.	3.1	23
54	Performanceâ€based earthquake engineering assessment of a selfâ€centering, postâ€tensioned concrete bridge system. Earthquake Engineering and Structural Dynamics, 2011, 40, 887-902.	4.4	53

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55	Engineered Biomaterials for Construction: A Cradle-to-Cradle Design Methodology for Green Material Development. International Journal of Environmental, Cultural, Economic and Social Sustainability, 2011, 7, 157-166.	0.1	3
56	IMPLEMENTATION OF MULTISCALE MODELS IN A PROBABILISTIC FRAMEWORK FOR PERFORMANCE-BASED DURABILITY ENGINEERING. Springer Series in Geomechanics and Geoengineering, 2011, , 173-176.	0.1	0
57	NONLINEAR MICROMECHANICAL MODELING OF HYGROTHERMAL EFFECTS ON STRUCTURAL BIOBASED COMPOSITE MATERIALS. Springer Series in Geomechanics and Geoengineering, 2011, , 189-192.	0.1	0
58	Modeling Residual Displacements of Concrete Bridge Columns under Earthquake Loads Using Fiber Elements. Journal of Bridge Engineering, 2010, 15, 240-249.	2.9	45
59	Evaluation of a Sprayable, Ductile Cement-Based Composite for the Seismic Retrofit of Unreinforced Masonry Infills. , 2009, , .		16
60	Seismic Performance of Non-Ductile RC Frames with Brick Infill. , 2009, , .		19
61	Comparison of Retrofitting Techniques for Existing Steel Moment Resisting Frames. , 2009, , .		2
62	Simulation of self-centring fibre-reinforced concrete columns. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2008, 161, 77-84.	0.4	4
63	Investigation of Infill Panels Made from Engineered Cementitious Composites for Seismic Strengthening and Retrofit. Journal of Structural Engineering, 2005, 131, 1712-1720.	3.4	87
64	Cyclic Response of Unbonded Posttensioned Precast Columns with Ductile Fiber-Reinforced Concrete. Journal of Bridge Engineering, 2004, 9, 353-363.	2.9	254
65	Influence of Hysteretic Behavior on Equivalent Period and Damping of Structural Systems. Journal of Structural Engineering, 2003, 129, 576-585.	3.4	62
66	Unbonded Posttensioned Concrete Bridge Piers. I: Monotonic and Cyclic Analyses. Journal of Bridge Engineering, 2003, 8, 92-101.	2.9	89
67	Unbonded Posttensioned Concrete Bridge Piers. II: Seismic Analyses. Journal of Bridge Engineering, 2003, 8, 102-111.	2.9	52
68	Experimental Response of Precast Infill Panel Connections and Panels Made with DFRCC. Journal of Advanced Concrete Technology, 2003, 1, 327-333.	1.8	12