# Erik Schlangen

List of Publications by Year
in descending order

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Version: 2024-02-01

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|---|---|---|---|
| 258 papers | 12,359 citations | 20759 60 h-index | 32761 100 g-index |
| 271 all docs | 271 docs citations | 271 times ranked | 5423 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A Review on Non-destructive Evaluation of Civil Structures Using Magnetic Sensors. Lecture Notes in Civil Engineering, 2023, , 647-656. | 0.3 | 2 |
| 2 | Interpretable Ensemble-Machine-Learning models for predicting creep behavior of concrete. Cement and Concrete Composites, 2022, 125, 104295. | 4.6 | 109 |
| 3 | A review of printing strategies, sustainable cementitious materials and characterization methods in the context of extrusion-based 3D concrete printing. Journal of Building Engineering, 2022, 45, 103599. | 1.6 | 30 |
| 4 | Experimental and numerical investigation on the role of interface for crack-width control of hybrid SHCC concrete beams. Engineering Structures, 2022, 251, 113378. | 2.6 | 13 |
| 5 | Microstructure-informed deep convolutional neural network for predicting short-term creep modulus of cement paste. Cement and Concrete Research, 2022, 152, 106681. | 4.6 | 17 |
| 6 | Influence of sand drying and mixing sequence on the performance of mortars with fine recycled concrete aggregates. Construction and Building Materials, 2022, 315, 125750. | 3.2 | 10 |
| 7 | Effect of slags of different origins and the role of sulfur in slag on the hydration characteristics of cement-slag systems. Construction and Building Materials, 2022, 316, 125266. | 3.2 | 17 |
| 8 | Design and analyses of printable strain hardening cementitious composites with optimized particle size distribution. Construction and Building Materials, 2022, 324, 126411. | 3.2 | 24 |
| 9 | Stress evolution in restrained GGBFS concrete due to autogenous deformation: bayesian optimization of aging creep. Construction and Building Materials, 2022, 324, 126690. | 3.2 | 8 |
| 10 | M&S highlight: Schlangen and van Mier (1992), Simple lattice model for numerical simulation of fracture of concrete materials and structures. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1. | 1.3 | 2 |
| 11 | Surface effects of molten slag spills on calcium aluminate cement paste. Materials and Design, 2022, 217, 110623. | 3.3 | 2 |
| 12 | Effect of curing methods during a long time gap between two printing sessions on the interlayer bonding of 3D printed cementitious materials. Construction and Building Materials, 2022, 332, 127394. | 3.2 | 14 |
| 13 | Fatigue life and cracking characterization of engineered cementitious composites (ECC) under flexural cyclic load. Construction and Building Materials, 2022, 335, 127465. | 3.2 | 12 |
| 14 | Plutonic Rocks as Protection Layers to Concrete Exposed to Ultra-High Temperature. Materials, 2022, 15, 3490. | 1.3 | 0 |
| 15 | Effects of bacteria-embedded polylactic acid (PLA) capsules on fracture properties of strain hardening cementitious composite (SHCC). Engineering Fracture Mechanics, 2022, 268, 108480. | 2.0 | 9 |
| 16 | Strengthening of concrete structures with ultra high performance fiber reinforced concrete (UHPFRC): A critical review. Construction and Building Materials, 2022, 336, 127398. | 3.2 | 37 |
| 17 | The role of porosity on degradation of concrete under severe internal and external brine attack in confined conditions. Construction and Building Materials, 2022, 341, 127721. | 3.2 | 1 |
| 18 | Convolutional neural network for predicting crack pattern and stress-crack width curve of air-void structure in 3D printed concrete. Engineering Fracture Mechanics, 2022, 271, 108624. | 2.0 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Towards understanding deformation and fracture in cementitious lattice materials: Insights from multiscale experiments and simulations. Construction and Building Materials, 2022, 345, 128409. | 3.2 | 4 |
| 20 | Tunable mechanical behavior of auxetic cementitious cellular composites (CCCs): Experiments and simulations. Construction and Building Materials, 2021, 266, 121388. | 3.2 | 27 |
| 21 | Physical, chemical and mineralogical characterization of Dutch fine recycled concrete aggregates: A comparative study. Construction and Building Materials, 2021, 270, 121475. | 3.2 | 19 |
| 22 | Chloride Ion Penetration into Cracked UHPFRC During Wetting-drying Cycles. RILEM Bookseries, 2021, , 227-238. | 0.2 | 1 |
| 23 | Determination of Loss of Reinforcement Due to Corrosion through X-ray Computer Micro-Tomography. Materials, 2021, 14, 893. | 1.3 | 2 |
| 24 | Modeling of microstructural effects on the creep of hardened cement paste using an experimentally informed lattice model. Computer-Aided Civil and Infrastructure Engineering, 2021, 36, 560-576. | 6.3 | 20 |
| 25 | The Prospect of Microwave Heating: Towards a Faster and Deeper Crack Healing in Asphalt Pavement. Processes, 2021, 9, 507. | 1.3 | 13 |
| 26 | Characterization of air-void systems in 3D printed cementitious materials using optical image scanning and X-ray computed tomography. Materials Characterization, 2021, 173, 110948. | 1.9 | 47 |
| 27 | The role of rejuvenators in embedded damage healing for asphalt pavement. Materials and Design, 2021, 202, 109564. | 3.3 | 32 |
| 28 | A discrete lattice model for assessment of buildability performance of 3Dâ€printed concrete. Computer-Aided Civil and Infrastructure Engineering, 2021, 36, 638-655. | 6.3 | 24 |
| 29 | Experimental Investigation of the Performance of a Hybrid Self-Healing System in Porous Asphalt under Fatigue Loadings. Materials, 2021, 14, 3415. | 1.3 | 17 |
| 30 | Use of fine recycled concrete aggregates in concrete: A critical review. Journal of Building Engineering, 2021, 38, 102196. | 1.6 | 121 |
| 31 | Effect of coarse aggregate size on non-uniform stress/strain and drying-induced microcracking in concrete. Composites Part B: Engineering, 2021, 216, 108880. | 5.9 | 18 |
| 32 | Fresh and hardened properties of self-compacting concrete containing recycled fine clay brick aggregates. Materials and Structures/Materiaux Et Constructions, 2021, 54, 1. | 1.3 | 12 |
| 33 | Assessing strain rate sensitivity of cement paste at the micro-scale through micro-cantilever testing. Cement and Concrete Composites, 2021, 121, 104084. | 4.6 | 14 |
| 34 | Sustainable materials for 3D concrete printing. Cement and Concrete Composites, 2021, 122, 104156. | 4.6 | 108 |
| 35 | A numerical study of fatigue of hardened cement paste at the microscale. International Journal of Fatigue, 2021, 151, 106401. | 2.8 | 2 |
| 36 | Experimental study of flexural fatigue behaviour of cement paste at the microscale. International Journal of Fatigue, 2021, 151, 106378. | 2.8 | 8 |

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| 37 | Experimental investigation of the short-term creep recovery of hardened cement paste at micrometre length scale. Cement and Concrete Research, 2021, 149, 106562. | 4.6 | 13 |
| 38 | 3D printing of calcined clay-limestone-based cementitious materials. Cement and Concrete Research, 2021, 149, 106553. | 4.6 | 52 |
| 39 | Bond of steel-mortar interface interfered by stray current. Cement and Concrete Research, 2021, 150, 106591. | 4.6 | 7 |
| 40 | Durability of an UHPFRC under mechanical and chloride loads. Construction and Building Materials, 2021, 311, 125223. | 3.2 | 12 |
| 41 | Micromechanical testing and modelling of blast furnace slag cement pastes. Construction and Building Materials, 2020, 239, 117841. | 3.2 | 19 |
| 42 | X-Ray Micro Tomography of Water Absorption by Superabsorbent Polymers in Mortar. RILEM Bookseries, 2020, , 29-37. | 0.2 | 7 |
| 43 | Investigation of drying-induced non-uniform deformation, stress, and micro-crack propagation in concrete. Cement and Concrete Composites, 2020, 114, 103786. | 4.6 | 22 |
| 44 | Effect of relative humidity on drying-induced damage in concrete: A comparative study of digital image correlation and lattice modelling. Materials and Design, 2020, 196, 109128. | 3.3 | 12 |
| 45 | Effect of printing parameters on interlayer bond strength of 3D printed limestone-calcined clay-based cementitious materials: An experimental and numerical study. Construction and Building Materials, 2020, 262, 120094. | 3.2 | 85 |
| 46 | Discrete lattice fracture modelling of hydrated cement paste under uniaxial compression at micro-scale. Construction and Building Materials, 2020, 263, 120153. | 3.2 | 9 |
| 47 | Effect of different grade levels of calcined clays on fresh and hardened properties of ternary-blended cementitious materials for 3D printing. Cement and Concrete Composites, 2020, 114, 103708. | 4.6 | 81 |
| 48 | Lattice Fracture Model for Concrete Fracture Revisited: Calibration and Validation. Applied Sciences (Switzerland), 2020, 10, 4822. | 1.3 | 23 |
| 49 | Chemo-physico-mechanical properties of the interface zone between bacterial PLA self-healing capsules and cement paste. Cement and Concrete Research, 2020, 138, 106228. | 4.6 | 27 |
| 50 | Mechanical Behavior of Printed Strain Hardening Cementitious Composites. Materials, 2020, 13, 2253. | 1.3 | 33 |
| 51 | Elucidating the Effect of Accelerated Carbonation on Porosity and Mechanical Properties of Hydrated Portland Cement Paste Using X-Ray Tomography and Advanced Micromechanical Testing. Micromachines, 2020, 11, 471. | 1.4 | 15 |
| 52 | Micro-cantilever testing on the short-term creep behaviour of cement paste at micro-scale. Cement and Concrete Research, 2020, 134, 106105. | 4.6 | 23 |
| 53 | Fundamental investigation on the frost resistance of mortar with microencapsulated phase change materials. Cement and Concrete Composites, 2020, 113, 103705. | 4.6 | 18 |
| 54 | Improving printability of limestone-calcined clay-based cementitious materials by using viscosity-modifying admixture. Cement and Concrete Research, 2020, 132, 106040. | 4.6 | 141 |

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| 55 | A novel self-healing system: Towards a sustainable porous asphalt. Journal of Cleaner Production, 2020, 259, 120815. | 4.6 | 49 |
| 56 | Experimentally validated meso-scale fracture modelling of mortar using output from micromechanical models. Cement and Concrete Composites, 2020, 110, 103567. | 4.6 | 28 |
| 57 | Cementitious cellular composites with auxetic behavior. Cement and Concrete Composites, 2020, 111, 103624. | 4.6 | 35 |
| 58 | Evaluating compressive mechanical LDPM parameters based on an upscaled multiscale approach. Construction and Building Materials, 2020, 251, 118912. | 3.2 | 6 |
| 59 | Microstructure informed micromechanical modelling of hydrated cement paste: Techniques and challenges. Construction and Building Materials, 2020, 251, 118983. | 3.2 | 41 |
| 60 | Quality Assessment of Printable Strain Hardening Cementitious Composites Manufactured in Two Different Printing Facilities. RILEM Bookseries, 2020, , 824-838. | 0.2 | 4 |
| 61 | Extended Lattice Model to Simulate the Printing Process of 3D Printed Cementitious Materials. RILEM Bookseries, 2020, , 814-823. | 0.2 | 1 |
| 62 | Auxetic Behavior of Cementitious Cellular Composites Under Uniaxial Compression and Cyclic Loading. RILEM Bookseries, 2020, , 547-556. | 0.2 | 1 |
| 63 | Assessing Hydrated Cement Paste Properties Using Experimentally Informed Discrete Models. Journal of Materials in Civil Engineering, 2019, 31, . | 1.3 | 9 |
| 64 | Experimental and numerical study on mechanical properties of cement paste pipes subjected to uniaxial tensile loading. Theoretical and Applied Fracture Mechanics, 2019, 103, 102296. | 2.1 | 1 |
| 65 | Temperature and moisture effects on electrical resistance and strain sensitivity of smart concrete. Construction and Building Materials, 2019, 224, 420-427. | 3.2 | 78 |
| 66 | Combined experimental and numerical study of uniaxial compression failure of hardened cement paste at micrometre length scale. Cement and Concrete Research, 2019, 126, 105925. | 4.6 | 55 |
| 67 | Experimentally informed fracture modelling of interfacial transition zone at micro-scale. Cement and Concrete Composites, 2019, 104, 103383. | 4.6 | 36 |
| 68 | Numerical investigation of crack self-sealing in cement-based composites with superabsorbent polymers. Cement and Concrete Composites, 2019, 104, 103395. | 4.6 | 26 |
| 69 | Limestone and Calcined Clay-Based Sustainable Cementitious Materials for 3D Concrete Printing: A Fundamental Study of Extrudability and Early-Age Strength Development. Applied Sciences (Switzerland), 2019, 9, 1809. | 1.3 | 69 |
| 70 | The Effect of Viscosity-Modifying Admixture on the Extrudability of Limestone and Calcined Clay-Based Cementitious Material for Extrusion-Based 3D Concrete Printing. Materials, 2019, 12, 1374. | 1.3 | 98 |
| 71 | Effect of viscosity modifier admixture on Portland cement paste hydration and microstructure. Construction and Building Materials, 2019, 212, 818-840. | 3.2 | 42 |
| 72 | An approach to develop printable strain hardening cementitious composites. Materials and Design, 2019, 169, 107651. | 3.3 | 102 |

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| 73 | Optimization of the Calcium Alginate Capsules for Self-Healing Asphalt. Applied Sciences (Switzerland), 2019, 9, 468. | 1.3 | 30 |
| 74 | Physical Characterization of Dutch Fine Recycled Concrete Aggregates: A Comparative Study. Proceedings (mdpi), 2019, 34, 7. | 0.2 | 2 |
| 75 | Experimentally informed micromechanical modelling of cement paste: An approach coupling X-ray computed tomography and statistical nanoindentation. Composites Part B: Engineering, 2019, 157, 109-122. | 5.9 | 54 |
| 76 | Modelling of deformation and fracture for a model quasi-brittle material with controlled porosity: Synthetic versus real microstructure. Engineering Fracture Mechanics, 2019, 205, 399-417. | 2.0 | 15 |
| 77 | Deformation and fracture of 3D printed disordered lattice materials: Experiments and modeling. Materials and Design, 2019, 162, 143-153. | 3.3 | 66 |
| 78 | Investigation of the Potential Use of Calcium Alginate Capsules for Self-Healing in Porous Asphalt Concrete. Materials, 2019, 12, 168. | 1.3 | 36 |
| 79 | Feasibility of Using Low CO2 Concrete Alternatives in Extrusion-Based 3D Concrete Printing. RILEM Bookseries, 2019, , 269-276. | 0.2 | 11 |
| 80 | Combined experimental and numerical study on micro-cube indentation splitting test of cement paste. Engineering Fracture Mechanics, 2018, 199, 773-786. | 2.0 | 39 |
| 81 | Calcium alginate capsules encapsulating rejuvenator as healing system for asphalt mastic. Construction and Building Materials, 2018, 169, 379-387. | 3.2 | 87 |
| 82 | Self-healing properties of recycled asphalt mixtures containing metal waste: An approach through microwave radiation heating. Journal of Environmental Management, 2018, 214, 242-251. | 3.8 | 76 |
| 83 | Expansion and degradation of cement paste in sodium sulfate solutions. Construction and Building Materials, 2018, 158, 410-422. | 3.2 | 33 |
| 84 | Effect of RAP and fibers addition on asphalt mixtures with self-healing properties gained by microwave radiation heating. Construction and Building Materials, 2018, 159, 164-174. | 3.2 | 72 |
| 85 | Modelling deformation and fracture of Gilsocarbon graphite subject to service environments. Journal of Nuclear Materials, 2018, 499, 18-28. | 1.3 | 12 |
| 86 | Static and Fatigue Tests on Cementitious Cantilever Beams Using Nanoindenter. Micromachines, 2018, 9, 630. | 1.4 | 22 |
| 87 | Size effect on splitting strength of hardened cement paste: Experimental and numerical study. Cement and Concrete Composites, 2018, 94, 264-276. | 4.6 | 60 |
| 88 | Selfâ€Healing Asphalt Review: From Idea to Practice. Advanced Materials Interfaces, 2018, 5, 1800536. | 1.9 | 120 |
| 89 | Microstructure-Based Prediction of the Elastic Behaviour of Hydrating Cement Pastes. Applied Sciences (Switzerland), 2018, 8, 442. | 1.3 | 13 |
| 90 | Towards understanding stochastic fracture performance of cement paste at micro length scale based on numerical simulation. Construction and Building Materials, 2018, 183, 189-201. | 3.2 | 45 |

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| 91 | Effect of metallic waste addition on the electrical, thermophysical and microwave crack-healing properties of asphalt mixtures. Construction and Building Materials, 2018, 187, 1039-1050. | 3.2 | 56 |
| 92 | Deliberate Deformation of Concrete in the Fresh State - Crack Risk and Efficient Production of Curved Precast Elements. , 2018, , 2521-2529. | | 1 |
| 93 | On the Potential of Lattice Type Model for Predicting Shear Capacity of Reinforced Concrete and SHCC Structures. , 2018, , 804-813. | | 5 |
| 94 | Piezoresistive Properties of Cementitious Composites Reinforced by PVA Fibres. RILEM Bookseries, 2018, , 709-717. | 0.2 | 0 |
| 95 | Mechanical Properties of Ductile Cementitious Composites Incorporating Microencapsulated Phase Change Materials. RILEM Bookseries, 2018, , 115-122. | 0.2 | 3 |
| 96 | The Use of Alkaliphilic Bacteria-based Repair Solution for Porous Network Concrete Healing Mechanism. Procedia Engineering, 2017, 171, 606-613. | 1.2 | 16 |
| 97 | A comparative study of the induction healing behaviors of hot and warm mix asphalt. Construction and Building Materials, 2017, 144, 663-670. | 3.2 | 55 |
| 98 | Experimental observation of the self-healing microcapsules containing rejuvenator states in asphalt binder. Construction and Building Materials, 2017, 147, 533-542. | 3.2 | 37 |
| 99 | Development of ductile cementitious composites incorporating microencapsulated phase change materials. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2017, 9, 169-180. | 0.7 | 13 |
| 100 | Recommendation of RILEM TC 246-TDC: test methods to determine durability of concrete under combined environmental actions and mechanical load. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1. | 1.3 | 11 |
| 101 | Test methods to determine durability of concrete under combined environmental actions andÂmechanical load: finalÂreport of RILEM TC 246-TDC. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1. | 1.3 | 32 |
| 102 | Experimentally validated multi-scale modelling scheme of deformation and fracture of cement paste. Cement and Concrete Research, 2017, 102, 175-186. | 4.6 | 63 |
| 103 | Experimental and numerical study of crack behaviour for capsule-based self-healing cementitious materials. Construction and Building Materials, 2017, 156, 219-229. | 3.2 | 26 |
| 104 | The compartmented alginate fibres optimisation for bitumen rejuvenator encapsulation. Journal of Traffic and Transportation Engineering (English Edition), 2017, 4, 347-359. | 2.0 | 34 |
| 105 | CoRncrete: A corn starch based building material. Construction and Building Materials, 2017, 154, 411-423. | 3.2 | 42 |
| 106 | Towards understanding the influence of porosity on mechanical and fracture behaviour of quasi-brittle materials: experiments and modelling. International Journal of Fracture, 2017, 205, 57-72. | 1.1 | 77 |
| 107 | Influence of Cracking on Moisture Uptake in Strain-Hardening Cementitious Composites. Journal of Nanomechanics & Micromechanics, 2017, 7, . | 1.4 | 19 |
| 108 | Design and testing of tubular polymeric capsules for self-healing of concrete. IOP Conference Series: Materials Science and Engineering, 2017, 251, 012003. | 0.3 | 4 |

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| 109 | Modeling Framework for Fracture in Multiscale Cement-Based Material Structures. Materials, 2017, 10, 587. | 1.3 | 43 |
| 110 | Influence of Microencapsulated Phase Change Material (PCM) Addition on (Micro) Mechanical Properties of Cement Paste. Materials, 2017, 10, 863. | 1.3 | 46 |
| 111 | Self-Sealing Cementitious Materials by Using Water-Swelling Rubber Particles. Materials, 2017, 10, 979. | 1.3 | 3 |
| 112 | Bio-based Self-healing Mortar: An Experimental and Numerical Study. Journal of Advanced Concrete Technology, 2017, 15, 536-543. | 0.8 | 28 |
| 113 | Research on the Mechanical, Thermal, Induction Heating and Healing Properties of Steel Slag/Steel Fibers Composite Asphalt Mixture. Applied Sciences (Switzerland), 2017, 7, 1088. | 1.3 | 56 |
| 114 | Selection of Nutrient Used in Biogenic Healing Agent for Cementitious Materials. Frontiers in Materials, 2017, 4, . | 1.2 | 24 |
| 115 | Failure Modes in Concrete Repair Systems due to Ongoing Corrosion. Advances in Materials Science and Engineering, 2017, 2017, 1-14. | 1.0 | 5 |
| 116 | Upscaling Cement Paste Microstructure to Obtain the Fracture, Shear, and Elastic Concrete Mechanical LDPM Parameters. Materials, 2017, 10, 242. | 1.3 | 20 |
| 117 | Simulation-Aided Design of Tubular Polymeric Capsules for Self-Healing Concrete. Materials, 2017, 10, 10. | 1.3 | 36 |
| 118 | An Evaluation of the Efficiency of Compartmented Alginate Fibres Encapsulating a Rejuvenator as an Asphalt Pavement Healing System. Applied Sciences (Switzerland), 2017, 7, 647. | 1.3 | 36 |
| 119 | Chemical Processes. RILEM State-of-the-Art Reports, 2017, , 79-100. | 0.3 | 0 |
| 120 | A 3D Lattice Modelling Study of Drying Shrinkage Damage in Concrete Repair Systems. Materials, 2016, 9, 575. | 1.3 | 38 |
| 121 | Characteristics of Ceramic Fiber Modified Asphalt Mortar. Materials, 2016, 9, 788. | 1.3 | 26 |
| 122 | Microscale Testing and Modelling of Cement Paste as Basis for Multi-Scale Modelling. Materials, 2016, 9, 907. | 1.3 | 76 |
| 123 | Micromechanical Properties of a New Polymeric Microcapsule for Self-Healing Cementitious Materials. Materials, 2016, 9, 1025. | 1.3 | 71 |
| 124 | Investigation of the optimal self-healing temperatures and healing time of asphalt binders. Construction and Building Materials, 2016, 113, 1029-1033. | 3.2 | 80 |
| 125 | Effect of fibres addition on the physical and mechanical properties of asphalt mixtures with crack-healing purposes by microwave radiation. Construction and Building Materials, 2016, 127, 369-382. | 3.2 | 83 |
| 126 | The reinforcement and healing of asphalt mastic mixtures by rejuvenator encapsulation in alginate compartmented fibres. Smart Materials and Structures, 2016, 25, 084003. | 1.8 | 50 |

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| 127 | Use of phase change materials (PCMs) to mitigate early age thermal cracking in concrete: Theoretical considerations. Construction and Building Materials, 2016, 126, 332-344. | 3.2 | 78 |
| 128 | Self-healing mortar with pH-sensitive superabsorbent polymers: testing of the sealing efficiency by water flow tests. Smart Materials and Structures, 2016, 25, 084007. | 1.8 | 73 |
| 129 | Fabrication and characterization of self-healing microcapsules containing bituminous rejuvenator by a nano-inorganic/organic hybrid method. Construction and Building Materials, 2016, 121, 471-482. | 3.2 | 35 |
| 130 | Tailoring material properties for 3D microfabrication: In-situ experimentation and multi-scale modelling. , 2016, , . | | 0 |
| 131 | Bacteria-based self-healing concrete to increase liquid tightness of cracks. Construction and Building Materials, 2016, 122, 118-125. | 3.2 | 278 |
| 132 | Anm: a geometrical model for the composite structure of mortar and concrete using real-shape particles. Materials and Structures/Materiaux Et Constructions, 2016, 49, 149-158. | 1.3 | 66 |
| 133 | Synthesis and characterization of a new polymeric microcapsule and feasibility investigation in self-healing cementitious materials. Construction and Building Materials, 2016, 105, 487-495. | 3.2 | 141 |
| 134 | Bio-Based Self-Healing Concrete: From Research to Field Application. Advances in Polymer Science, 2016, , 345-385. | 0.4 | 44 |
| 135 | Experimentally informed multi-scale modelling of mechanical properties of quasi-brittle nuclear graphite. Engineering Fracture Mechanics, 2016, 153, 360-377. | 2.0 | 45 |
| 136 | Self-healing in cementitious materials: Materials, methods and service conditions. Materials and Design, 2016, 92, 499-511. | 3.3 | 237 |
| 137 | Compartmented Alginate Fibres as a Healing Agent (Rejuvenator) Delivery System and Reinforcement for Asphalt Pavemnets. , 2016, , . | | 1 |
| 138 | Multi-scale characterization and modelling of damage evolution in nuclear Gilsocarbon graphite. Materials Research Society Symposia Proceedings, 2015, 1809, 1-6. | 0.1 | 1 |
| 139 | Nano-Indentation Testing and Modelling of Cement Paste. , 2015, , . | | 1 |
| 140 | Drying Shrinkage Damage in Concrete Repair Systems: A 3D Modelling Study. , 2015, , . | | 4 |
| 141 | Self-Healing Technology for Asphalt Pavements. Advances in Polymer Science, 2015, , 285-306. | 0.4 | 58 |
| 142 | A novel capsule-based self-recovery system with a chloride ion trigger. Scientific Reports, 2015, 5, 10866. | 1.6 | 63 |
| 143 | Investigation the self-healing mechanism of aged bitumen using microcapsules containing rejuvenator. Construction and Building Materials, 2015, 85, 49-56. | 3.2 | 94 |
| 144 | Experimental investigation of self-healing behavior of bitumen/microcapsule composites by a modified beam on elastic foundation method. Materials and Structures/Materiaux Et Constructions, 2015, 48, 4067-4076. | 1.3 | 48 |

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| 145 | Combined experimental and numerical study of fracture behaviour of cement paste at the microlevel. Cement and Concrete Research, 2015, 73, 123-135. | 4.6 | 61 |
| 146 | A numerical approach for the design of multiscale fibre-reinforced cementitious composites. Philosophical Magazine, 2015, 95, 3305-3327. | 0.7 | 12 |
| 147 | Investigation the possibility of a new approach of using microcapsules containing waste cooking oil: In situ rejuvenation for aged bitumen. Construction and Building Materials, 2015, 74, 83-92. | 3.2 | 119 |
| 148 | Corrosion induced cover cracking studied by X-ray computed tomography, nanoindentation, and energy dispersive X-ray spectrometry (EDS). Materials and Structures/Materiaux Et Constructions, 2015, 48, 2043-2062. | 1.3 | 78 |
| 149 | Experimental and Numerical Study of Water Uptake in Strained SHCC. , 2015, , . | | 1 |
| 150 | Chloride ingress in cracked concrete: a laser induced breakdown spectroscopy (LIBS) study. Journal of Advanced Concrete Technology, 2014, 12, 425-442. | 0.8 | 33 |
| 151 | Micromechanical Study of the Interface Properties in Concrete Repair Systems. Journal of Advanced Concrete Technology, 2014, 12, 320-339. | 0.8 | 40 |
| 152 | Tailoring the Mechanical Properties of Highâ€Aspectâ€Ratio Carbon Nanotube Arrays using Amorphous Silicon Carbide Coatings. Advanced Functional Materials, 2014, 24, 5737-5744. | 7.8 | 53 |
| 153 | Experimental examination on chloride penetration through micro-crack in concrete. KSCE Journal of Civil Engineering, 2014, 18, 188-198. | 0.9 | 27 |
| 154 | Carbon Nanotubes: Tailoring the Mechanical Properties of Highâ€Aspectâ€Ratio Carbon Nanotube Arrays using Amorphous Silicon Carbide Coatings (Adv. Funct. Mater. 36/2014). Advanced Functional Materials, 2014, 24, 5736-5736. | 7.8 | 0 |
| 155 | Influence of quality and variation of recycled masonry aggregates on failure behavior of cement treated demolition waste. Construction and Building Materials, 2014, 71, 521-527. | 3.2 | 8 |
| 156 | Understanding fracture behaviour of PGA reactor core graphite: Perspective. Materials Science and Technology, 2014, 30, 129-145. | 0.8 | 17 |
| 157 | Tailoring strain-hardening cementitious composite repair systems through numerical experimentation. Cement and Concrete Composites, 2014, 53, 200-213. | 4.6 | 41 |
| 158 | Unravelling porous asphalt concrete with induction heating. Construction and Building Materials, 2014, 71, 152-157. | 3.2 | 35 |
| 159 | Characterization of sustainable bio-based mortar for concrete repair. Construction and Building Materials, 2014, 67, 344-352. | 3.2 | 131 |
| 160 | Lattice modeling of rapid chloride migration in concrete. Cement and Concrete Research, 2014, 61-62, 49-63. | 4.6 | 67 |
| 161 | Assessment of cracks in reinforced concrete by means of electrical resistance and image analysis. Construction and Building Materials, 2014, 65, 417-426. | 3.2 | 25 |
| 162 | Turning Back Time. Transportation Research Record, 2014, 2444, 52-62. | 1.0 | 55 |

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| 163 | Corrosion of steel in cracked concrete: A microscale study. , 2014, , 551-557. | | 1 |
| 164 | Numerical study of a strain hardening cementitious composite overlay system for durable concrete repair. , 2014, , 827-836. | | 0 |
| 165 | Stability investigation of self-healing microcapsules containing rejuvenator for bitumen. Polymer Degradation and Stability, 2013, 98, 1205-1215. | 2.7 | 101 |
| 166 | Addressing Infrastructure Durability and Sustainability by Self Healing Mechanisms - Recent Advances in Self Healing Concrete and Asphalt. Procedia Engineering, 2013, 54, 39-57. | 1.2 | 92 |
| 167 | Lattice modeling of chloride diffusion in sound and cracked concrete. Cement and Concrete Composites, 2013, 42, 30-40. | 4.6 | 159 |
| 168 | Experimental Techniques Used to Verify Healing. RILEM State-of-the-Art Reports, 2013, , 19-63. | 0.3 | 3 |
| 169 | Mimicking Bone Healing Process to Self Repair Concrete Structure Novel Approach Using Porous Network Concrete. Procedia Engineering, 2013, 54, 315-326. | 1.2 | 34 |
| 170 | Characterization of the material from the induction healing porous asphalt concrete trial section. Materials and Structures/Materiaux Et Constructions, 2013, 46, 831-839. | 1.3 | 30 |
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