# Dan Zenkert

List of Publications by Year
in descending order



88
papers

3,520
citations

101543
36
h-index

144013
57
g-index

90
all docs

90
docs citations

90
times ranked

2012
citing authors

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Multifunctional Carbon Fiber Composites: A Structural, Energy Harvesting, Strain-Sensing Material. ACS Applied Materials & Interfaces, 2022, 14, 33871-33880. | 8.0 | 11 |
| 2 | Potassium-insertion in polyacrylonitrile-based carbon fibres for multifunctional energy storage, morphing, and strain-sensing. Carbon, 2021, 171, 671-680. | 10.3 | 12 |
| 3 | A Structural Battery and its Multifunctional Performance. Advanced Energy and Sustainability Research, 2021, 2, 2000093. | 5.8 | 74 |
| 4 | A Structural Battery and its Multifunctional Performance. Advanced Energy and Sustainability Research, 2021, 2, 2170008. | 5.8 | 32 |
| 5 | A screen-printing method for manufacturing of current collectors for structural batteries. Multifunctional Materials, 2021, 4, 035002. | 3.7 | 12 |
| 6 | Alkali Ions Transport into Lignin-Based Hard Carbon Fibers. ECS Meeting Abstracts, 2021, MA2021-02, 227-227. | 0.0 | 0 |
| 7 | Characterization of the adhesive properties between structural battery electrolytes and carbon fibers. Composites Science and Technology, 2020, 188, 107962. | 7.8 | 25 |
| 8 | Shape-morphing carbon fiber composite using electrochemical actuation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7658-7664. | 7.1 | 25 |
| 9 | A residual performance methodology to evaluate multifunctional systems. Multifunctional Materials, 2020, 3, 025002. | 3.7 | 11 |
| 10 | Carbon Fiber Based Positive Electrodes in Laminated Structural Li-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 983-983. | 0.0 | 0 |
| 11 | Structural battery composites: a review. Functional Composites and Structures, 2019, 1, 042001. | 3.4 | 133 |
| 12 | Model of a structural battery and its potential for system level mass savings. Multifunctional Materials, 2019, 2, 035002. | 3.7 | 60 |
| 13 | Lignin Based Electrospun Carbon Fiber Anode for Sodium Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A1984-A1990. | 2.9 | 25 |
| 14 | Bicontinuous Electrolytes via Thermally Initiated Polymerization for Structural Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 4362-4369. | 5.1 | 71 |
| 15 | Blister propagation in sandwich panels. Journal of Sandwich Structures and Materials, 2019, 21, 1683-1699. | 3.5 | 0 |
| 16 | Prospective Life Cycle Assessment of a Structural Battery. Sustainability, 2019, 11, 5679. | 3.2 | 12 |
| 17 | Performance of Carbon Fibers with Various Coatings in Composite Lithium-Ion Structural Batteries. ECS Meeting Abstracts, 2019, , . | 0.0 | 0 |
| 18 | Multifunctional Performance of Sodiated Carbon Fibers. Journal of the Electrochemical Society, 2018, 165, B616-B622. | 2.9 | 16 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Multifunctional performance of a carbon fiber UD lamina electrode for structural batteries. Composites Science and Technology, 2018, 168, 81-87. | 7.8 | 96 |
| 20 | Graphitic microstructure and performance of carbon fibre Li-ion structural battery electrodes. Multifunctional Materials, 2018, 1, 015003. | 3.7 | 65 |
| 21 | Lithium iron phosphate coated carbon fiber electrodes for structural lithium ion batteries. Composites Science and Technology, 2018, 162, 235-243. | 7.8 | 87 |
| 22 | Lignin Based Electrospun Carbon Fibers in Sodium Ion Batteries, Oral Presentation. ECS Meeting Abstracts, 2018, , . | 0.0 | 0 |
| 23 | Sodiated Carbon Fibres for Use in Future Multifunctional Structures. ECS Meeting Abstracts, 2018, MA2018-01, 1986-1986. | 0.0 | 0 |
| 24 | Cost and weight efficient partitioning of composite automotive structures. Polymer Composites, 2017, 38, 2174-2181. | 4.6 | 15 |
| 25 | A model to analyse deformations and stresses in structural batteries due to electrode expansions. Composite Structures, 2017, 179, 580-589. | 5.8 | 31 |
| 26 | Structural lithium ion battery electrolytes<i>via</i>reaction induced phase-separation. Journal of Materials Chemistry A, 2017, 5, 25652-25659. | 10.3 | 96 |
| 27 | Draping simulation-supported framework for cost- and weight- effective composite design. International Journal of Automotive Composites, 2017, 3, 1. | 0.1 | 1 |
| 28 | Impact response of ductile self-reinforced composite corrugated sandwich beams. Composites Part B: Engineering, 2016, 99, 121-131. | 12.0 | 40 |
| 29 | Bending energy absorption of self-reinforced poly(ethylene terephthalate) composite sandwich beams. Composite Structures, 2016, 140, 582-589. | 5.8 | 30 |
| 30 | Method for the cost-efficient and weight-efficient material diversity and partitioning of a carbon fibre composite body structure. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2016, 230, 49-60. | 1.9 | 5 |
| 31 | Compression properties of novel thermoplastic carbon fibre and poly-ethylene terephthalate fibre composite lattice structures. Materials & Design, 2015, 65, 1110-1120. | 5.1 | 55 |
| 32 | Dynamic compression response of self-reinforced poly(ethylene terephthalate) composites and corrugated sandwich cores. Composites Part A: Applied Science and Manufacturing, 2015, 77, 96-105. | 7.6 | 37 |
| 33 | A material selection approach to evaluate material substitution for minimizing the life cycle environmental impact of vehicles. Materials and Design, 2015, 83, 704-712. | 7.0 | 57 |
| 34 | Piezo-Electrochemical Energy Harvesting with Lithium-Intercalating Carbon Fibers. ACS Applied Materials & Interfaces, 2015, 7, 13898-13904. | 8.0 | 49 |
| 35 | Effects of manufacturing constraints on the cost and weight efficiency of integral and differential automotive composite structures. Composite Structures, 2015, 134, 572-578. | 5.8 | 21 |
| 36 | Integral versus differential design for high-volume manufacturing of composite structures. Journal of Composite Materials, 2015, 49, 2897-2908. | 2.4 | 7 |

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| 37 | Residual strength of GRP laminates with multiple randomly distributed fragment impacts. Composites Part A: Applied Science and Manufacturing, 2014, 60, 66-74. | 7.6 | 8 |
| 38 | The effect of lithium-intercalation on the mechanical properties of carbon fibres. Carbon, 2014, 68, 725-733. | 10.3 | 66 |
| 39 | Multi-objective optimisation of vehicle bodies made of FRP sandwich structures. Composite Structures, 2014, 111, 75-84. | 5.8 | 36 |
| 40 | Piezo-electrochemical effect in lithium-intercalated carbon fibres. Electrochemistry Communications, 2013, 35, 65-67. | 4.7 | 34 |
| 41 | Expansion of carbon fibres induced by lithium intercalation for structural electrode applications. Carbon, 2013, 59, 246-254. | 10.3 | 71 |
| 42 | Simple and efficient prediction of bearing failure in single shear, composite lap joints. Composite Structures, 2013, 105, 35-44. | 5.8 | 26 |
| 43 | Compression and tensile properties of self-reinforced poly(ethylene terephthalate)-composites. Polymer Testing, 2013, 32, 221-230. | 4.8 | 40 |
| 44 | Impact of carbon fibre/epoxy corrugated cores. Composite Structures, 2012, 94, 3300-3308. | 5.8 | 19 |
| 45 | Impact of electrochemical cycling on the tensile properties of carbon fibres for structural lithium-ion composite batteries. Composites Science and Technology, 2012, 72, 792-798. | 7.8 | 84 |
| 46 | Failure mode shifts during constant amplitude fatigue loading of GFRP/foam core sandwich beams. International Journal of Fatigue, 2011, 33, 217-222. | 5.7 | 44 |
| 47 | Failure mechanisms in composite panels subjected to underwater impulsive loads. Journal of the Mechanics and Physics of Solids, 2011, 59, 1623-1646. | 4.8 | 84 |
| 48 | PAN-Based Carbon Fiber Negative Electrodes for Structural Lithium-Ion Batteries. Journal of the Electrochemical Society, 2011, 158, A1455. | 2.9 | 140 |
| 49 | Material Selection for a Curved C-Spar Based on Cost Optimization. Journal of Aircraft, 2011, 48, 797-804. | 2.4 | 7 |
| 50 | Integrated cost/weight optimization of aircraft structures. Structural and Multidisciplinary Optimization, 2010, 41, 325-334. | 3.5 | 59 |
| 51 | Testing and analysis of ultra thick composites. Composites Part B: Engineering, 2010, 41, 326-336. | 12.0 | 40 |
| 52 | Tensile strength of UD-composite laminates with multiple holes. Composites Science and Technology, 2010, 70, 1280-1287. | 7.8 | 18 |
| 53 | Buckling of laser-welded sandwich panels: Ultimate strength and experiments. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2010, 224, 29-45. | 0.5 | 5 |
| 54 | Cost/weight optimization of composite prepreg structures for best draping strategy. Composites Part A: Applied Science and Manufacturing, 2010, 41, 464-472. | 7.6 | 23 |

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| 55 | Manufacturing process adaptation for integrated cost/weight optimisation of aircraft structures. Plastics, Rubber and Composites, 2009, 38, 162-166. | 2.0 | 9 |
| 56 | Corrugated all-composite sandwich structures. Part 2: Failure mechanisms and experimental programme. Composites Science and Technology, 2009, 69, 920-925. | 7.8 | 102 |
| 57 | Tension, compression and shear fatigue of a closed cell polymer foam. Composites Science and Technology, 2009, 69, 785-792. | 7.8 | 87 |
| 58 | Notch and strain rate sensitivity of non-crimp fabric composites. Composites Science and Technology, 2009, 69, 793-800. | 7.8 | 20 |
| 59 | Corrugated all-composite sandwich structures. Part 1: Modeling. Composites Science and Technology, 2009, 69, 913-919. | 7.8 | 112 |
| 60 | Cost optimization of composite aircraft structures including variable laminate qualities. Composites Science and Technology, 2008, 68, 2748-2754. | 7.8 | 46 |
| 61 | Analysis of Three-Dimensional Quadratic Failure Criteria for Thick Composites using the Direct Micromechanics Method. Journal of Composite Materials, 2008, 42, 635-654. | 2.4 | 15 |
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| 64 | Buckling of laser-welded sandwich panels. Part 2: Elastic buckling normal to the webs. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2006, 220, 81-94. | 0.5 | 8 |
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| 66 | Damage tolerance assessment of composite sandwich panels with localised damage. Composites Science and Technology, 2005, 65, 2597-2611. | 7.8 | 94 |
| 67 | Compression-after-Impact Strength of Sandwich Panels with Core Crushing Damage. Applied Composite Materials, 2005, 12, 149-164. | 2.5 | 81 |
| 68 | Imperfection-induced Wrinkling Material Failure in Sandwich Panels. Journal of Sandwich Structures and Materials, 2005, 7, 195-219. | 3.5 | 26 |
| 69 | Effects of Anisotropy and Multiaxial Loading on the Wrinkling of Sandwich Panels. Journal of Sandwich Structures and Materials, 2005, 7, 177-194. | 3.5 | 24 |
| 70 | Fatigue of Closed Cell Foams. , 2005, , 171-181. | | 1 |
| 71 | Static indentation and unloading response of sandwich beams. Composites Part B: Engineering, 2004, 35, 511-522. | 12.0 | 66 |
| 72 | Failure Mechanisms and Modelling of Impact Damage in Sandwich Beams - A 2D Approach: Part II - Analysis and Modelling. Journal of Sandwich Structures and Materials, 2003, 5, 33-51. | 3.5 | 30 |

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| 73 | Failure Mechanisms and Modelling of Impact Damage in Sandwich Beams - A 2D Approach: Part I - Experimental Investigation. Journal of Sandwich Structures and Materials, 2003, 5, 7-31. | 3.5 | 68 |
| 74 | Fatigue Behavior of Foam Core Sandwich Beams with Sub-Interface Impact Damage. Journal of Sandwich Structures and Materials, 2003, 5, 147-160. | 3.5 | 11 |
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| 81 | A test specimen with constant stress intensity factor for prescribed displacement. International Journal of Fracture, 1993, 61, 173-181. | 2.2 | 1 |
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