# Philippa A Reed

List of Publications by Year
in descending order

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| 100 | 2,241 | 186265 | 254184 |
|---|---|---|---|
| papers | citations | 28 h-index | 43 g-index |

| 103 | 103 | 103 | 1548 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The effects of surface pits and intermetallics on the competing failure modes in laser shock peened AA7075-T651: Experiments and modelling. International Journal of Fatigue, 2022, 155, 106568. | 5.7 | 2 |
| 2 | Fatigue crack initiation and growth behavior in a notch with periodic overloads in the lowâ€cycle fatigue regime of FV566 exâ€service steam turbine blade material. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 546-564. | 3.4 | 6 |
| 3 | Control of fatigue failure mechanisms in multilayer coatings by varying the architectural parameters of an intermetallic interlayer. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 1035-1051. | 3.4 | 2 |
| 4 | Effect of heat treatment on fatigue crack growth in IN718/316L multiple-materials layered structures fabricated by laser powder bed fusion. International Journal of Fatigue, 2022, 160, 106852. | 5.7 | 2 |
| 5 | Microstructural and hardness evolution of additively manufactured Alâ€“Siâ€“Cu alloy processed by high-pressure torsion. Journal of Materials Science, 2022, 57, 8956-8977. | 3.7 | 5 |
| 6 | Microstructural influences on fatigue crack initiation and early propagation in Ni-based superalloy. Materials Science and Technology, 2022, 38, 1081-1094. | 1.6 | 3 |
| 7 | Characterisation of strain localisation under cyclic loading at 450ÂÂ°C by SEM-DIC in a PM Ni-based superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143464. | 5.6 | 2 |
| 8 | Selection of appropriate numerical models for modelling the stresses in mooring chains. Marine Structures, 2021, 75, 102864. | 3.8 | 3 |
| 9 | Low-cycle fatigue assessment of offshore mooring chains under service loading. Marine Structures, 2021, 76, 102892. | 3.8 | 3 |
| 10 | Effects of Î³Ê¹ size and carbide distribution on fatigue crack growth mechanisms at 650ÂÂ°C in an advanced Ni-based superalloy. International Journal of Fatigue, 2021, 145, 106086. | 5.7 | 11 |
| 11 | Effects of laser shock peening on the mechanisms of fatigue short crack initiation and propagation of AA7075-T651. International Journal of Fatigue, 2021, 143, 106025. | 5.7 | 47 |
| 12 | Data rich imaging approaches assessing fatigue crack initiation and early propagation in a DS superalloy at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 805, 140592. | 5.6 | 5 |
| 13 | Investigating the fatigue performance of soft multilayer coatings with varying locations of an intermetallic interlayer. International Journal of Fatigue, 2021, 145, 106130. | 5.7 | 5 |
| 14 | Effect on overall fatigue performance of varying thickness of an intermetallic sublayer within a soft multilayer coating. International Journal of Fatigue, 2021, 146, 106155. | 5.7 | 6 |
| 15 | Fatigue crack growth in IN718/316L multi-materials layered structures fabricated by laser powder bed fusion. International Journal of Fatigue, 2021, 152, 106454. | 5.7 | 13 |
| 16 | Fatigue crack growth mechanisms in powder metallurgy Ni-based superalloysâ€”A review. International Journal of Fatigue, 2020, 141, 105887. | 5.7 | 64 |
| 17 | A numerical study of crack shielding/anti-shielding in layered architectures. International Journal of Fatigue, 2019, 124, 503-519. | 5.7 | 7 |
| 18 | Synthesis and Properties of Electrodeposited Niâ€“Co/WS2 Nanocomposite Coatings. Coatings, 2019, 9, 148. | 2.6 | 9 |

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|---|---|---|---|
| 19 | On the mechanism of oxidation-fatigue damage at intermediate temperatures in a single crystal Ni-based superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 648-661. | 5.6 | 16 |
| 20 | Fatigue assessment of multilayer coatings using lock-in thermography. Materials and Design, 2018, 141, 361-373. | 7.0 | 14 |
| 21 | Role of oxygen in enhanced fatigue cracking in a PM Ni-based superalloy: Stress assisted grain boundary oxidation or dynamic embrittlment?. Corrosion Science, 2018, 139, 141-154. | 6.6 | 46 |
| 22 | Strain accumulation and fatigue crack initiation at pores and carbides in a SX superalloy at room temperature. International Journal of Fatigue, 2018, 114, 22-33. | 5.7 | 44 |
| 23 | A comparison of quasi-static indentation and low-velocity impact on composite overwrapped pressure vessels. Journal of Composite Materials, 2018, 52, 4051-4060. | 2.4 | 10 |
| 24 | An electrodeposited Ni-P-WS2 coating with combined super-hydrophobicity and self-lubricating properties. Electrochimica Acta, 2017, 245, 872-882. | 5.2 | 65 |
| 25 | Characterisation of strain localisation processes during fatigue crack initiation and early crack propagation by SEM-DIC in an advanced disc alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 699, 128-144. | 5.6 | 62 |
| 26 | A numerical study of the effects of shot peening on the short crack growth behaviour in notched geometries under bending fatigue tests. International Journal of Fatigue, 2017, 103, 99-111. | 5.7 | 19 |
| 27 | Effects of oxygen-related damage on dwell-fatigue crack propagation in a P/M Ni-based superalloy: From 2D to 3D assessment. International Journal of Fatigue, 2017, 99, 175-186. | 5.7 | 35 |
| 28 | Effect of microstructure on fatigue behaviour of advanced high strength ductile cast iron produced by quenching and partitioning process. International Journal of Fatigue, 2017, 104, 397-407. | 5.7 | 29 |
| 29 | Numerical modelling of the fatigue crack shape evolution in a shot-peened steam turbine material. International Journal of Fatigue, 2017, 104, 120-135. | 5.7 | 13 |
| 30 | Application of Xâ€Ray Microtomography to Evaluate Complex Microstructure and Predict the Lower Bound Fatigue Potential of Cast Alâ€“7(0.7)Siâ€“4Cuâ€“3Niâ€“Mg Alloys. Advanced Engineering Materials, 2017, 19, 1700218. | 3.5 | 0 |
| 31 | Self-lubricating Ni-P-MoS2 composite coatings. Surface and Coatings Technology, 2016, 307, 926-934. | 4.8 | 96 |
| 32 | Evolution of microstructure in AZ91 alloy processed by high-pressure torsion. Journal of Materials Science, 2016, 51, 3380-3389. | 3.7 | 37 |
| 33 | Fatigue crack growth behaviour in the LCF regime in a shot peened steam turbine blade material. International Journal of Fatigue, 2016, 82, 280-291. | 5.7 | 30 |
| 34 | Fatigue crack growth in a nickel-based superalloy at elevated temperature - experimental studies, viscoplasticity modelling and XFEM predictions. Mechanics of Advanced Materials and Modern Processes, 2015, 1, . | 2.2 | 14 |
| 35 | Effects of microstructures on fatigue crack initiation and short crack propagation at room temperature in an advanced disc superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 641, 148-159. | 5.6 | 36 |
| 36 | 3-D analysis of fatigue crack behaviour in a shot peened steam turbine blade material. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 91-103. | 5.6 | 19 |

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|---|---|---|---|
| 37 | Synchrotron radiation computed tomography for experimental validation of a tensile strength model for unidirectional fibre-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2015, 77, 106-113. | 7.6 | 93 |
| 38 | Superplastic behaviour of AZ91 magnesium alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 637, 1-11. | 5.6 | 68 |
| 39 | Influence of oxidation on fatigue crack initiation and propagation in turbine disc alloy N18. International Journal of Fatigue, 2015, 75, 89-99. | 5.7 | 47 |
| 40 | Managing heterogeneous datasets. Information Systems, 2014, 44, 34-53. | 3.6 | 6 |
| 41 | A framework for user driven data management. Information Systems, 2014, 42, 36-58. | 3.6 | 8 |
| 42 | Resistive switching of Cu/SiC/Au memory devices with a high ON/OFF ratio. Solid-State Electronics, 2014, 94, 98-102. | 1.4 | 27 |
| 43 | Amorphous SiC based non-volatile resistive memories with ultrahigh ON/OFF ratios. Microelectronic Engineering, 2014, 119, 61-64. | 2.4 | 20 |
| 44 | Grain size effects in a Ni-based turbine disc alloy in the time and cycle dependent crack growth regimes. International Journal of Fatigue, 2014, 62, 217-227. | 5.7 | 75 |
| 45 | Micromechanisms of short fatigue crack growth in an Alâ€“Si piston alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 612, 302-309. | 5.6 | 22 |
| 46 | Evaluating surface deformation and near surface strain hardening resulting from shot peening a tempered martensitic steel and application to low cycle fatigue. International Journal of Fatigue, 2013, 54, 106-117. | 5.7 | 53 |
| 47 | Comparison of fatigue crack propagation behaviour in two gas turbine disc alloys under creepâ€“fatigue conditions: Evaluating microstructure, environment and temperature effects. Materials Science and Technology, 2013, 29, 781-787. | 1.6 | 15 |
| 48 | Effects of shot peening on short crack growth rate and resulting low cycle fatigue behaviour in low pressure turbine blade material. Materials Science and Technology, 2013, 29, 788-796. | 1.6 | 22 |
| 49 | Research Data Management Education for Future Curators. International Journal of Digital Curation, 2013, 8, 288-294. | 0.2 | 1 |
| 50 | Deflected â€˜teardrop crackingâ€™ in nickel based superalloys: Sustained macroscopic deflected fatigue crack growth. International Journal of Fatigue, 2012, 44, 188-201. | 5.7 | 1 |
| 51 | Micromechanisms of fatigue crack growth in cast aluminium piston alloys. International Journal of Fatigue, 2012, 42, 227-237. | 5.7 | 33 |
| 52 | Assessment of three-dimensional crack growth in ductile layered material systems. Engineering Fracture Mechanics, 2012, 88, 15-27. | 4.3 | 3 |
| 53 | The effect of shot peening on notched low cycle fatigue. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8579-8588. | 5.6 | 32 |
| 54 | Analysis of fatigue crack initiation and Sâ€“N response of model cast aluminium piston alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7331-7340. | 5.6 | 36 |

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|---|---|---|---|
| 55 | Fatigue crack shielding and deflection in plain bearings under large-scale yielding. Engineering Failure Analysis, 2010, 17, 648-657. | 4.0 | 3 |
| 56 | Utilising dynamic factory simulation to improve unit cost estimation and aid design decisions. , 2010, , . | | 3 |
| 57 | Microstructure variation effects on room temperature fatigue threshold and crack propagation in Udimet 720Li Niâ€base superalloy. Fatigue and Fracture of Engineering Materials and Structures, 2009, 32, 685-701. | 3.4 | 13 |
| 58 | A numerical study of crack shielding and deflection under extensive plasticity. Engineering Fracture Mechanics, 2009, 76, 1345-1356. | 4.3 | 3 |
| 59 | Invited review: Adaptive numerical modelling and hybrid physically based ANM approaches in materials engineering â€“ a survey. Materials Science and Technology, 2009, 25, 488-503. | 1.6 | 5 |
| 60 | Fatigue crack growth mechanisms in superalloys: Overview. Materials Science and Technology, 2009, 25, 258-270. | 1.6 | 23 |
| 61 | Comparison of fatigue performance of HVOF spray coated and conventional roll bonded aluminium bearing alloys. Materials Science and Technology, 2009, 25, 575-581. | 1.6 | 7 |
| 62 | A knowledge-based system for cost modelling of aircraft gas turbines. Journal of Engineering Design, 2009, 20, 289-305. | 2.3 | 14 |
| 63 | Thermal activation of fatigue crack growth: Analysing the mechanisms of fatigue crack propagation in superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 491, 279-289. | 5.6 | 32 |
| 64 | Effects of microstructure on room temperature fatigue crack initiation and short crack propagation in Udimet 720Li Ni-base superalloy. International Journal of Fatigue, 2008, 30, 2009-2020. | 5.7 | 54 |
| 65 | Effect of environment on notch fatigue behaviour in CMSX<sub>4</sub>. Materials Science and Technology, 2007, 23, 1439-1445. | 1.6 | 11 |
| 66 | High temperature fatigue â€“ Influences of environment and creep. Materials Science and Technology, 2007, 23, 1387-1388. | 1.6 | 1 |
| 67 | Adaptive numerical modelling of high temperature strength, creep and fatigue behaviour in Ni based superalloys. Materials Science and Technology, 2007, 23, 1402-1407. | 1.6 | 7 |
| 68 | A comparison of high temperature fatigue crack propagation in various subsolvus heat treated turbine disc alloys. Materials Science and Technology, 2007, 23, 1419-1423. | 1.6 | 23 |
| 69 | The mechanisms of long fatigue crack growth behaviour in Alâ€“Si casting alloys at room and elevated temperature. Materials Science and Technology, 2007, 23, 1396-1401. | 1.6 | 25 |
| 70 | An effective method to investigate short crack growth behaviour by reverse bending testing. International Journal of Fatigue, 2007, 29, 565-574. | 5.7 | 6 |
| 71 | Effects of graphite nodules on crack growth behaviour of austempered ductile iron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 445-446, 374-385. | 5.6 | 49 |
| 72 | Microstructure effects on high temperature fatigue crack initiation and short crack growth in turbine disc nickel-base superalloy Udimet 720Li. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 448, 67-79. | 5.6 | 78 |

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|---|---|---|---|
| 73 | Fatigue crack growth and closure in fine-grained aluminium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 428, 247-255. | 5.6 | 23 |
| 74 | Microstructural Analysis of Fatigue Initiation in Al-Si Casting Alloys. Materials Science Forum, 2006, 519-521, 1083-1088. | 0.3 | 17 |
| 75 | Microstructural Factors Affecting Fatigue Initiation in Various Al Based Bearing Alloys. Materials Science Forum, 2006, 519-521, 1071-1076. | 0.3 | 5 |
| 76 | Effects of mixed mode loading on fatigue and creepâ€“fatigue in SRR-99 single crystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 394, 256-265. | 5.6 | 10 |
| 77 | The effect of silicon content on long crack fatigue behaviour of aluminiumâ€“silicon piston alloys at elevated temperature. International Journal of Fatigue, 2005, 27, 1564-1570. | 5.7 | 49 |
| 78 | An investigation of crack growth behaviour under creep-fatigue condition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 67-71. | 5.6 | 12 |
| 79 | Fatigue, hardness and oxidation properties of sing.... , 2005, , . | | 0 |
| 80 | Fatigue crack initiation and early growth in a multiphase Al alloy included in a multilayer material system. Materials Science and Technology, 2004, 20, 47-56. | 1.6 | 9 |
| 81 | The effect of environment and orientation on fatigue crack growth behaviour of CMSX-4 nickel base single crystal at 650 Â°C. Materials Letters, 2004, 58, 99-103. | 2.6 | 29 |
| 82 | Fatigue crack initiation and short crack growth in nickel-base turbine disc alloys?the effects of microstructure and operating parameters*1. International Journal of Fatigue, 2003, 25, 1089-1099. | 5.7 | 82 |
| 83 | Microstructural characterisation of fatigue crack initiation in Al-based plain bearing alloys. International Journal of Fatigue, 2003, 25, 1135-1145. | 5.7 | 13 |
| 84 | Elevated temperature short crack fatigue behaviour in near eutectic Al?Si alloys. International Journal of Fatigue, 2003, 25, 863-869. | 5.7 | 77 |
| 85 | Short crack initiation and growth at 600Â°C in notched specimens of Inconel718. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 340, 139-154. | 5.6 | 98 |
| 86 | Numerical modelling of crack shielding and deflection in a multi-layered material system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 342, 11-22. | 5.6 | 20 |
| 87 | Modelling of microstructural effects in the fatigue of austempered ductile iron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 346, 273-286. | 5.6 | 10 |
| 88 | High temperature fatigue crack growth in powder processed nickel based superalloy U720Li. Materials Science and Technology, 2002, 18, 349-353. | 1.6 | 7 |
| 89 | Anomalous crack shape development (tear drop cracking) in turbine disc material Udimet 720. Materials Science and Technology, 2000, 16, 133-146. | 1.6 | 6 |
| 90 | Microstructural Influences on Fatigue Crack Initation and Early Growth Behaviour in Plain Bearing Al-based Linings. Materials Science Forum, 2000, 331-337, 1445-1450. | 0.3 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Data driven knowledge extraction of materials properties. , 1999, , . | | 1 |
| 92 | An example of the use of neural computing techniques in materials scienceâ€"the modelling of fatigue thresholds in Ni-base superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 260, 222-239. | 5.6 | 41 |
| 93 | Hypermedia systems for improving knowledge, understanding and skills in engineering degree courses. Computers and Education, 1998, 31, 69-88. | 8.3 | 8 |
| 94 | The Application of Neural Computing Methods to the Modelling of Fatigue in Ni-Base Superalloys. , 1996, , . | | 2 |
| 95 | CBL in engineering: Students' use of a learning resource on phase diagrams. Computers and Education, 1995, 25, 75-80. | 8.3 | 6 |
| 96 | FONI-SPATE: A new fibre optic stress/strain sensor, using a near-infrared variant of the SPATE effect. Electronics Letters, 1994, 30, 1619-1620. | 1.0 | 0 |
| 97 | Mixed mode fatigue effects in Ni-base single crystals â€" Preliminary results. Scripta Metallurgica Et Materialia, 1992, 26, 1829-1834. | 1.0 | 4 |
| 98 | Classification of unbalanced data with transparent kernels. , 0, , . | | 8 |
| 99 | Stress Relaxation in Shot-Peened Geometric Features Subjected to Fatigue: Experiments and Modelling. Advanced Materials Research, 0, 996, 729-735. | 0.3 | 1 |
| 100 | Modeling of crack path in layered architectures composed of dissimilar materials. Fatigue and Fracture of Engineering Materials and Structures, 0, , . | 3.4 | 0 |