Selda Oterkus

List of Publications by Year
in descending order

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120 papers	2,678 citations	279798 23 h-index	233421 45 g-index
120 all docs	120 docs citations	120 times ranked	716 citing authors

#	Article	IF	Citations
1	A peridynamic-based machine learning model for one-dimensional and two-dimensional structures. Continuum Mechanics and Thermodynamics, 2023, 35, 741-773.	2.2	6
2	Derivation of dual-horizon state-based peridynamics formulation based on Eulerâ€“Lagrange equation. Continuum Mechanics and Thermodynamics, 2023, 35, 841-861.	2.2	10
3	Determination of horizon size in state-based peridynamics. Continuum Mechanics and Thermodynamics, 2023, 35, 705-728.	2.2	20
4	Evaluation of stress intensity factors under thermal effect employing domain integral method and ordinary state based peridynamic theory. Continuum Mechanics and Thermodynamics, 2023, 35, 1021-1040.	2.2	6
5	A computational homogenization framework for non-ordinary state-based peridynamics. Engineering With Computers, 2023, 39, 461-487.	6.1	12
6	Peridynamic computational homogenization theory for materials with evolving microstructure and damage. Engineering With Computers, 2023, 39, 2945-2957.	6.1	5
7	Peridynamic model for visco-hyperelastic material deformation in different strain rates. Continuum Mechanics and Thermodynamics, 2022, 34, 977-1011.	2.2	27
8	An In-depth Investigation of Bimaterial Interface Modeling Using Ordinary State-based Peridynamics. Journal of Peridynamics and Nonlocal Modeling, 2022, 4, 112-138.	2.9	16
9	Investigating the influence of residual stresses on fatigue crack growth for additively manufactured titanium alloy Ti6Al4V by using peridynamics. International Journal of Fatigue, 2022, 155, 106624.	5.7	15
10	Static and dynamic mechanical behaviors of cracked Mindlin plates in ordinary state-based peridynamic framework. Acta Mechanica, 2022, 233, 299-316.	2.1	6
11	Experimental investigation on the influence of interceptor plate on the motion performance of a cylindrical FPSO. Ocean Engineering, 2022, 243, 110339.	4.3	6
12	Probabilistic ship corrosion wastage model with Bayesian inference. Ocean Engineering, 2022, 246, 110571.	4.3	4
13	Peridynamic analysis to investigate the influence of microstructure and porosity on fatigue crack propagation in additively manufactured Ti6Al4V. Engineering Fracture Mechanics, 2022, 261, 108212.	4.3	11
14	Static condensation of peridynamic heat conduction model. Mathematics and Mechanics of Solids, 2022, 27, 2689-2714.	2.4	7
15	Vessel relocation strategy for multiple steel catenary riser fatigue damage mitigation. Ocean Engineering, 2022, 248, 110493.	4.3	1
16	Experimental investigation of motion behavior in irregular wave and site selection analysis of a hybrid offshore renewable power station for Egypt. Ocean Engineering, 2022, 249, 110858.	4.3	3
17	Fracture parameter investigations of functionally graded materials by using ordinary state based peridynamics. Engineering Analysis With Boundary Elements, 2022, 139, 180-191.	3.7	8
18	Thermomechanical phase change peridynamic model for welding analysis. Engineering Analysis With Boundary Elements, 2022, 140, 371-385.	3.7	6

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19	Peridynamic Modelling of Propagation of Cracks in Photovoltaic Panels. Procedia Structural Integrity, 2022, 41, 305-316.	0.8	1
20	Some analytical solutions to peridynamic beam equations. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2022, 102, .	1.6	5
21	Model order reduction of linear peridynamic systems using static condensation. Mathematics and Mechanics of Solids, 2021, 26, 552-569.	2.4	6
22	A smoothed variable horizon peridynamics and its application to the fracture parameters evaluation. Acta Mechanica, 2021, 232, 533-553.	2.1	8
23	Coupled thermo-fluid-mechanical peridynamic model for analysing composite under fire scenarios. Composite Structures, 2021, 255, 113006.	5.8	12
24	Mixed-mode stress intensity factors evaluation of flat shells under in-plane loading employing ordinary state-based peridynamics. Theoretical and Applied Fracture Mechanics, 2021, 112, 102841.	4.7	11
25	Peridynamic Formulation for Higher-Order Plate Theory. Journal of Peridynamics and Nonlocal Modeling, 2021, 3, 185-210.	2.9	6
26	Thermal diffusion analysis by using dual horizon peridynamics. Journal of Thermal Stresses, 2021, 44, 51-74.	2.0	11
27	A state-based peridynamic formulation for functionally graded Kirchhoff plates. Mathematics and Mechanics of Solids, 2021, 26, 530-551.	2.4	8
28	An energy-based peridynamic model for fatigue cracking. Engineering Fracture Mechanics, 2021, 241, 107373.	4.3	44
29	Peridynamic Higher-Order Beam Formulation. Journal of Peridynamics and Nonlocal Modeling, 2021, 3, 67-83.	2.9	11
30	Analysis of Functionally Graded Timoshenko Beams by Using Peridynamics. Journal of Peridynamics and Nonlocal Modeling, 2021, 3, 148-166.	2.9	7
31	Modeling inelasticity in peridynamics. , 2021, , 205-221.		1
32	Application of peridynamics for rock mechanics and porous media. , 2021, , 387-401.		2
33	Peridynamics in dynamic fracture modeling. , 2021, , 159-181.		0
34	Brittle damage prediction for corroded stiffened structures under static loading conditions by using peridynamics. Ships and Offshore Structures, 2021, 16, 153-170.	1.9	1
35	Fatigue analysis of polycrystalline materials using Peridynamic Theory with a novel crack tip detection algorithm. Ocean Engineering, 2021, 222, 108572.	4.3	21
36	A Novel Peridynamic Mindlin Plate Formulation Without Limitation on Material Constants. Journal of Peridynamics and Nonlocal Modeling, 2021, 3, 287-306.	2.9	3

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37	Peridynamic formulation for higher order functionally graded beams. Thin-Walled Structures, 2021, 160, 107343.	5.3	6
38	Fracture parameter analysis of flat shells under out-of-plane loading using ordinary state-based peridynamics. Engineering Fracture Mechanics, 2021, 244, 107560.	4.3	11
39	Peridynamic investigation of the effect of porosity on fatigue nucleation for additively manufactured titanium alloy Ti6Al4V. Theoretical and Applied Fracture Mechanics, 2021, 112, 102925.	4.7	24
40	Peridynamic modelling of higher order functionally graded plates. Mathematics and Mechanics of Solids, 2021, 26, 1737-1759.	2.4	5
41	A physics-guided machine learning model for two-dimensional structures based on ordinary state-based peridynamics. Theoretical and Applied Fracture Mechanics, 2021, 112, 102872.	4.7	15
42	Ordinary state-based peridynamics for geometrically nonlinear analysis of plates. Theoretical and Applied Fracture Mechanics, 2021, 112, 102877.	4.7	12
43	Peridynamics for geometrically nonlinear analysis of three-dimensional beam structures. Engineering Analysis With Boundary Elements, 2021, 126, 68-92.	3.7	4
44	Numerical hydrodynamics-based design of an offshore platform to support a desalination plant and a wind turbine in Egypt. Ocean Engineering, 2021, 229, 108598.	4.3	19
45	Ordinary state-based peridynamic homogenization of periodic micro-structured materials. Theoretical and Applied Fracture Mechanics, 2021, 113, 102960.	4.7	17
46	Experimental study on the motion response of an integrated floating desalination plant and offshore wind turbine on a non-ship platform. Ocean Engineering, 2021, 234, 109275.	4.3	9
47	Floating catenary riser system concept for brownfield application. Ocean Engineering, 2021, 236, 109549.	4.3	1
48	Peridynamic analysis of fatigue crack growth in fillet welded joints. Ocean Engineering, 2021, 235, 109348.	4.3	15
49	Ordinary state-based peridynamic shell model with arbitrary horizon domains for surface effect correction. Theoretical and Applied Fracture Mechanics, 2021, 115, 103068.	4.7	4
50	Vessel relocation solution for steel catenary riser touch down fatigue management. Ocean Engineering, 2021, 237, 109632.	4.3	3
51	Experimental investigation on a towing assessment for a floating desalination plant for Egypt. Ocean Engineering, 2021, 238, 109746.	4.3	6
52	Modelling of Eulerian incompressible fluid flows by using peridynamic differential operator. Ocean Engineering, 2021, 239, 109815.	4.3	5
53	Modelling of cracks with frictional contact based on peridynamics. Theoretical and Applied Fracture Mechanics, 2021, 116, 103082.	4.7	14
54	Implementation of modified Wheeler model in peridynamic fatigue model to predict effects of overload and underload on fatigue crack growth rate. Theoretical and Applied Fracture Mechanics, 2021, 116, 103115.	4.7	9

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55	Application of artificial intelligence and machine learning in peridynamics. , 2021, , 419-435.		0
56	Environmentally-driven design of a floating desalination platform (Case study: reverse osmosis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	1.9	4
57	Family Member Search Algorithms for Peridynamic Analysis. Journal of Peridynamics and Nonlocal Modeling, 2020, 2, 59-84.	2.9	10
58	Ordinary state-based peridynamic model for geometrically nonlinear analysis. Engineering Fracture Mechanics, 2020, 224, 106750.	4.3	20
59	A Kirchhoff plate formulation in a state-based peridynamic framework. Mathematics and Mechanics of Solids, 2020, 25, 727-738.	2.4	46
60	Dynamic crack arrest analysis by ordinary state-based peridynamics. International Journal of Fracture, 2020, 221, 155-169.	2.2	53
61	Fluid-elastic structure interaction simulation by using ordinary state-based peridynamics and peridynamic differential operator. Engineering Analysis With Boundary Elements, 2020, 121, 126-142.	3.7	20
62	A new methodology for the prediction of burst pressure for API 5L X grade flawless pipelines. Ocean Engineering, 2020, 212, 107602.	4.3	15
63	Multi-phase fluid flow simulation by using peridynamic differential operator. Ocean Engineering, 2020, 216, 108081.	4.3	19
64	Free vibration analysis of cracked plates using peridynamics. Ships and Offshore Structures, 2020, 15, S220-S229.	1.9	11
65	Experimental investigation on the motion response of a novel floating desalination plant for Egypt. Ocean Engineering, 2020, 210, 107535.	4.3	14
66	Investigating the effect of brittle crack propagation on the strength of ship structures by using peridynamics. Ocean Engineering, 2020, 209, 107472.	4.3	22
67	Investigation of the effect of shape of inclusions on homogenized properties by using peridynamics. Procedia Structural Integrity, 2020, 28, 1094-1105.	0.8	4
68	Buckling analysis of cracked plates using peridynamics. Ocean Engineering, 2020, 214, 107817.	4.3	12
69	Effect of horizon shape in peridynamics. Procedia Structural Integrity, 2020, 28, 418-429.	0.8	1
70	Closed-form dispersion relationships in bond-based peridynamics. Procedia Structural Integrity, 2020, 28, 482-490.	0.8	2
71	Burst Pressure Prediction of API 5L X-Grade Dented Pipelines Using Deep Neural Network. Journal of Marine Science and Engineering, 2020, 8, 766.	2.6	11
72	Updating the Distributions of Uncertain Parameters Involved in Fatigue Analysis. Journal of Marine Science and Engineering, 2020, 8, 778.	2.6	3

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73	Influence of Different Types of Small-Size Defects on Propagation of Macro-cracks in Brittle Materials. Journal of Peridynamics and Nonlocal Modeling, 2020, 2, 289-316.	2.9	16
74	Thermally-induced fracture analysis of polycrystalline materials by using peridynamics. Engineering Analysis With Boundary Elements, 2020, 117, 167-187.	3.7	13
75	Two-dimensional finite-difference time-domain formulation for sound propagation in a temperature-dependent elastomer-fluid medium. Journal of the Acoustical Society of America, 2020, 147, 428-445.	1.1	2
76	Peridynamic Modelling of Fracture in Polycrystalline Ice. Journal of Mechanics, 2020, 36, 223-234.	1.4	20
77	Peridynamic Model for a Mindlin Plate Resting on a Winkler Elastic Foundation. Journal of Peridynamics and Nonlocal Modeling, 2020, 2, 229-242.	2.9	11
78	Peridynamic Mindlin Plate Formulation for Functionally Graded Materials. Journal of Composites Science, 2020, 4, 76.	3.0	1
79	Conceptual Design and Numerical Analysis of a Novel Floating Desalination Plant Powered by Marine Renewable Energy for Egypt. Journal of Marine Science and Engineering, 2020, 8, 95.	2.6	27
80	In-Plane and Out-of Plane Failure of an Ice Sheet using Peridynamics. Journal of Mechanics, 2020, 36, 265-271.	1.4	14
81	Structural health monitoring of an offshore wind turbine tower using iFEM methodology. Ocean Engineering, 2020, 204, 107291.	4.3	49
82	An in-depth investigation of critical stretch based failure criterion in ordinary state-based peridynamics. International Journal of Fracture, 2020, 226, 97-119.	2.2	12
83	Peridynamic modelling of periodic microstructured materials. Procedia Structural Integrity, 2020, 28, 820-828.	0.8	6
84	Peridynamic shell membrane formulation. Procedia Structural Integrity, 2020, 28, 411-417.	0.8	3
85	Investigation of the effect of porosity on intergranular brittle fracture using peridynamics. Procedia Structural Integrity, 2020, 28, 472-481.	0.8	0
86	Peridynamic formulation for Timoshenko beam. Procedia Structural Integrity, 2020, 28, 464-471.	0.8	3
87	Peridynamic modelling of Hertzian indentation fracture. Procedia Structural Integrity, 2020, 28, 1559-1571.	0.8	2
88	Implementation of peridynamic beam and plate formulations in finite element framework. Continuum Mechanics and Thermodynamics, 2019, 31, 301-315.	2.2	45
89	Ordinary state-based peridynamic modelling for fully coupled thermoelastic problems. Continuum Mechanics and Thermodynamics, 2019, 31, 907-937.	2.2	42
90	Peridynamics for the thermomechanical behavior of shell structures. Engineering Fracture Mechanics, 2019, 219, 106623.	4.3	48

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91	Non-local modeling for fluid flow coupled with heat transfer by using peridynamic differential operator. Engineering Analysis With Boundary Elements, 2019, 105, 104-121.	3.7	28
92	Nonlocal numerical simulation of low Reynolds number laminar fluid motion by using peridynamic differential operator. Ocean Engineering, 2019, 179, 135-158.	4.3	33
93	Peridynamics formulation for beam structures to predict damage in offshore structures. Ocean Engineering, 2019, 173, 244-267.	4.3	37
94	Peridynamics review. Mathematics and Mechanics of Solids, 2019, 24, 3714-3739.	2.4	189
95	A computational approach based on ordinary state-based peridynamics with new transition bond for dynamic fracture analysis. Engineering Fracture Mechanics, 2019, 206, 359-374.	4.3	52
96	Fully coupled thermomechanical analysis of laminated composites by using ordinary state based peridynamic theory. Composite Structures, 2019, 207, 397-424.	5.8	61
97	An Eulerâ€“Bernoulli beam formulation in an ordinary state-based peridynamic framework. Mathematics and Mechanics of Solids, 2019, 24, 361-376.	2.4	48
98	Two-dimensional implementation of the coarsening method for linear peridynamics. AIMS Materials Science, 2019, 6, 252-275.	1.4	12
99	Predicting fracture evolution during lithiation process using peridynamics. Engineering Fracture Mechanics, 2018, 192, 176-191.	4.3	58
100	Peridynamic modelling of fracture in marine lithium-ion batteries. Ocean Engineering, 2018, 151, 257-267.	4.3	12
101	Potential risk of vapour cloud explosion in FLNG liquefaction modules. Ocean Engineering, 2018, 149, 423-437.	4.3	14
102	A Review of Nondestructive Examination Methods for New-building Ships Undergoing Classification Society Survey. Journal of Ship Production and Design, 2018, 34, 9-19.	0.4	3
103	A Novel Moisture Diffusion Modeling Approach Using Finite Element Analysis. Electronics (Switzerland), 2018, 7, 438.	3.1	4
104	Mechanical and acoustic performance prediction model for elastomers in different environmental conditions. Journal of the Acoustical Society of America, 2018, 144, 2269-2280.	1.1	5
105	Three-Dimensional Peridynamic Model for Predicting Fracture Evolution during the Lithiation Process. Energies, 2018, 11, 1461.	3.1	23
106	Peridynamic Analysis of Marine Composites under Shock Loads by Considering Thermomechanical Coupling Effects. Journal of Marine Science and Engineering, 2018, 6, 38.	2.6	14
107	Peridynamic Modeling of Thermo-Oxidative Damage Evolution in a Composite Lamina. , 2017, , .		6
108	Fully coupled poroelastic peridynamic formulation for fluid-filled fractures. Engineering Geology, 2017, 225, 19-28.	6.3	93

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109	Peridynamic modeling of fuel pellet cracking. Engineering Fracture Mechanics, 2017, 176, 23-37.	4.3	66
110	Peridynamic Modeling of Diffusion by Using Finite-Element Analysis. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1823-1831.	2.5	43
111	Dynamic propagation of a macrocrack interacting with parallel small cracks. AIMS Materials Science, 2017, 4, 118-136.	1.4	47
112	Ordinary state-based peridynamics for plastic deformation according to von Mises yield criteria with isotropic hardening. Journal of the Mechanics and Physics of Solids, 2016, 86, 192-219.	4.8	238
113	Title is missing!. Journal of Mechanics of Materials and Structures, 2015, 10, 167-193.	0.6	24
114	Equivalent acceleration assessment of JEDEC moisture sensitivity levels using peridynamics. , 2015, , .		1
115	Peridynamics for Fully Coupled Thermomechanical Analysis of Fiber Reinforced Laminates. , 2014, , .		18
116	Hygro-thermo-mechanical analysis and failure prediction in electronic packages by using peridynamics. , 2014, , .		26
117	Peridynamic thermal diffusion. Journal of Computational Physics, 2014, 265, 71-96.	3.8	243
118	Fully coupled peridynamic thermomechanics. Journal of the Mechanics and Physics of Solids, 2014, 64, 1-23.	4.8	173
119	Simulation of electro-migration through peridynamics. , 2013, , .		20
120	Simulation stage-based seabed pre-trenching technique for steel catenary riser touchdown fatigue analysis. Ships and Offshore Structures, 0, , 1-17.	1.9	0