

Selda Oterkus

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7407561/publications.pdf>

Version: 2024-02-01

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	Peridynamic thermal diffusion. <i>Journal of Computational Physics</i> , 2014, 265, 71-96.	3.8	243
2	Ordinary state-based peridynamics for plastic deformation according to von Mises yield criteria with isotropic hardening. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 86, 192-219.	4.8	238
3	Peridynamics review. <i>Mathematics and Mechanics of Solids</i> , 2019, 24, 3714-3739.	2.4	189
4	Fully coupled peridynamic thermomechanics. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 64, 1-23.	4.8	173
5	Fully coupled poroelastic peridynamic formulation for fluid-filled fractures. <i>Engineering Geology</i> , 2017, 225, 19-28.	6.3	93
6	Peridynamic modeling of fuel pellet cracking. <i>Engineering Fracture Mechanics</i> , 2017, 176, 23-37.	4.3	66
7	Fully coupled thermomechanical analysis of laminated composites by using ordinary state based peridynamic theory. <i>Composite Structures</i> , 2019, 207, 397-424.	5.8	61
8	Predicting fracture evolution during lithiation process using peridynamics. <i>Engineering Fracture Mechanics</i> , 2018, 192, 176-191.	4.3	58
9	Dynamic crack arrest analysis by ordinary state-based peridynamics. <i>International Journal of Fracture</i> , 2020, 221, 155-169.	2.2	53
10	A computational approach based on ordinary state-based peridynamics with new transition bond for dynamic fracture analysis. <i>Engineering Fracture Mechanics</i> , 2019, 206, 359-374.	4.3	52
11	Structural health monitoring of an offshore wind turbine tower using iFEM methodology. <i>Ocean Engineering</i> , 2020, 204, 107291.	4.3	49
12	Peridynamics for the thermomechanical behavior of shell structures. <i>Engineering Fracture Mechanics</i> , 2019, 219, 106623.	4.3	48
13	An Euler-Bernoulli beam formulation in an ordinary state-based peridynamic framework. <i>Mathematics and Mechanics of Solids</i> , 2019, 24, 361-376.	2.4	48
14	Dynamic propagation of a macrocrack interacting with parallel small cracks. <i>AIMS Materials Science</i> , 2017, 4, 118-136.	1.4	47
15	A Kirchhoff plate formulation in a state-based peridynamic framework. <i>Mathematics and Mechanics of Solids</i> , 2020, 25, 727-738.	2.4	46
16	Implementation of peridynamic beam and plate formulations in finite element framework. <i>Continuum Mechanics and Thermodynamics</i> , 2019, 31, 301-315.	2.2	45
17	An energy-based peridynamic model for fatigue cracking. <i>Engineering Fracture Mechanics</i> , 2021, 241, 107373.	4.3	44
18	Peridynamic Modeling of Diffusion by Using Finite-Element Analysis. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2017, 7, 1823-1831.	2.5	43

#	ARTICLE	IF	CITATIONS
19	Ordinary state-based peridynamic modelling for fully coupled thermoelastic problems. <i>Continuum Mechanics and Thermodynamics</i> , 2019, 31, 907-937.	2.2	42
20	Peridynamics formulation for beam structures to predict damage in offshore structures. <i>Ocean Engineering</i> , 2019, 173, 244-267.	4.3	37
21	Nonlocal numerical simulation of low Reynolds number laminar fluid motion by using peridynamic differential operator. <i>Ocean Engineering</i> , 2019, 179, 135-158.	4.3	33
22	Non-local modeling for fluid flow coupled with heat transfer by using peridynamic differential operator. <i>Engineering Analysis With Boundary Elements</i> , 2019, 105, 104-121.	3.7	28
23	Peridynamic model for visco-hyperelastic material deformation in different strain rates. <i>Continuum Mechanics and Thermodynamics</i> , 2022, 34, 977-1011.	2.2	27
24	Conceptual Design and Numerical Analysis of a Novel Floating Desalination Plant Powered by Marine Renewable Energy for Egypt. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 95.	2.6	27
25	Hygro-thermo-mechanical analysis and failure prediction in electronic packages by using peridynamics. , 2014, , .		26
26	Title is missing!. <i>Journal of Mechanics of Materials and Structures</i> , 2015, 10, 167-193.	0.6	24
27	Peridynamic investigation of the effect of porosity on fatigue nucleation for additively manufactured titanium alloy Ti6Al4V. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 112, 102925.	4.7	24
28	Three-Dimensional Peridynamic Model for Predicting Fracture Evolution during the Lithiation Process. <i>Energies</i> , 2018, 11, 1461.	3.1	23
29	Investigating the effect of brittle crack propagation on the strength of ship structures by using peridynamics. <i>Ocean Engineering</i> , 2020, 209, 107472.	4.3	22
30	Fatigue analysis of polycrystalline materials using Peridynamic Theory with a novel crack tip detection algorithm. <i>Ocean Engineering</i> , 2021, 222, 108572.	4.3	21
31	Simulation of electro-migration through peridynamics. , 2013, , .		20
32	Ordinary state-based peridynamic model for geometrically nonlinear analysis. <i>Engineering Fracture Mechanics</i> , 2020, 224, 106750.	4.3	20
33	Fluid-elastic structure interaction simulation by using ordinary state-based peridynamics and peridynamic differential operator. <i>Engineering Analysis With Boundary Elements</i> , 2020, 121, 126-142.	3.7	20
34	Determination of horizon size in state-based peridynamics. <i>Continuum Mechanics and Thermodynamics</i> , 2023, 35, 705-728.	2.2	20
35	Peridynamic Modelling of Fracture in Polycrystalline Ice. <i>Journal of Mechanics</i> , 2020, 36, 223-234.	1.4	20
36	Multi-phase fluid flow simulation by using peridynamic differential operator. <i>Ocean Engineering</i> , 2020, 216, 108081.	4.3	19

#	ARTICLE	IF	CITATIONS
37	Numerical hydrodynamics-based design of an offshore platform to support a desalination plant and a wind turbine in Egypt. <i>Ocean Engineering</i> , 2021, 229, 108598.	4.3	19
38	Peridynamics for Fully Coupled Thermomechanical Analysis of Fiber Reinforced Laminates. , 2014, , .		18
39	Ordinary state-based peridynamic homogenization of periodic micro-structured materials. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 113, 102960.	4.7	17
40	Influence of Different Types of Small-Size Defects on Propagation of Macro-cracks in Brittle Materials. <i>Journal of Peridynamics and Nonlocal Modeling</i> , 2020, 2, 289-316.	2.9	16
41	An In-depth Investigation of Bimaterial Interface Modeling Using Ordinary State-based Peridynamics. <i>Journal of Peridynamics and Nonlocal Modeling</i> , 2022, 4, 112-138.	2.9	16
42	A new methodology for the prediction of burst pressure for API 5L X grade flawless pipelines. <i>Ocean Engineering</i> , 2020, 212, 107602.	4.3	15
43	A physics-guided machine learning model for two-dimensional structures based on ordinary state-based peridynamics. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 112, 102872.	4.7	15
44	Peridynamic analysis of fatigue crack growth in fillet welded joints. <i>Ocean Engineering</i> , 2021, 235, 109348.	4.3	15
45	Investigating the influence of residual stresses on fatigue crack growth for additively manufactured titanium alloy Ti6Al4V by using peridynamics. <i>International Journal of Fatigue</i> , 2022, 155, 106624.	5.7	15
46	Potential risk of vapour cloud explosion in FLNG liquefaction modules. <i>Ocean Engineering</i> , 2018, 149, 423-437.	4.3	14
47	Peridynamic Analysis of Marine Composites under Shock Loads by Considering Thermomechanical Coupling Effects. <i>Journal of Marine Science and Engineering</i> , 2018, 6, 38.	2.6	14
48	Experimental investigation on the motion response of a novel floating desalination plant for Egypt. <i>Ocean Engineering</i> , 2020, 210, 107535.	4.3	14
49	In-Plane and Out-of Plane Failure of an Ice Sheet using Peridynamics. <i>Journal of Mechanics</i> , 2020, 36, 265-271.	1.4	14
50	Modelling of cracks with frictional contact based on peridynamics. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 116, 103082.	4.7	14
51	Thermally-induced fracture analysis of polycrystalline materials by using peridynamics. <i>Engineering Analysis With Boundary Elements</i> , 2020, 117, 167-187.	3.7	13
52	Peridynamic modelling of fracture in marine lithium-ion batteries. <i>Ocean Engineering</i> , 2018, 151, 257-267.	4.3	12
53	Buckling analysis of cracked plates using peridynamics. <i>Ocean Engineering</i> , 2020, 214, 107817.	4.3	12
54	Coupled thermo-fluid-mechanical peridynamic model for analysing composite under fire scenarios. <i>Composite Structures</i> , 2021, 255, 113006.	5.8	12

#	ARTICLE	IF	CITATIONS
55	Ordinary state-based peridynamics for geometrically nonlinear analysis of plates. Theoretical and Applied Fracture Mechanics, 2021, 112, 102877.	4.7	12
56	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
57	Two-dimensional implementation of the coarsening method for linear peridynamics. AIMS Materials Science, 2019, 6, 252-275.	1.4	12
58	A computational homogenization framework for non-ordinary state-based peridynamics. Engineering With Computers, 2023, 39, 461-487.	6.1	12
59	Free vibration analysis of cracked plates using peridynamics. Ships and Offshore Structures, 2020, 15, S220-S229.	1.9	11
60	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
61	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
62	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
63	Thermal diffusion analysis by using dual horizon peridynamics. Journal of Thermal Stresses, 2021, 44, 51-74.	2.0	11
64	Peridynamic Higher-Order Beam Formulation. Journal of Peridynamics and Nonlocal Modeling, 2021, 3, 67-83.	2.9	11
65	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
66	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
67	Family Member Search Algorithms for Peridynamic Analysis. Journal of Peridynamics and Nonlocal Modeling, 2020, 2, 59-84.	2.9	10
68	Derivation of dual-horizon state-based peridynamics formulation based on Euler-Lagrange equation. Continuum Mechanics and Thermodynamics, 2023, 35, 841-861.	2.2	10
69	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
70	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
71	A smoothed variable horizon peridynamics and its application to the fracture parameters evaluation. Acta Mechanica, 2021, 232, 533-553.	2.1	8
72	A state-based peridynamic formulation for functionally graded Kirchhoff plates. Mathematics and Mechanics of Solids, 2021, 26, 530-551.	2.4	8

#	ARTICLE	IF	CITATIONS
73	Fracture parameter investigations of functionally graded materials by using ordinary state based peridynamics. <i>Engineering Analysis With Boundary Elements</i> , 2022, 139, 180-191.	3.7	8
74	Analysis of Functionally Graded Timoshenko Beams by Using Peridynamics. <i>Journal of Peridynamics and Nonlocal Modeling</i> , 2021, 3, 148-166.	2.9	7
75	Static condensation of peridynamic heat conduction model. <i>Mathematics and Mechanics of Solids</i> , 2022, 27, 2689-2714.	2.4	7
76	Peridynamic Modeling of Thermo-Oxidative Damage Evolution in a Composite Lamina. , 2017, , .		6
77	A peridynamic-based machine learning model for one-dimensional and two-dimensional structures. <i>Continuum Mechanics and Thermodynamics</i> , 2023, 35, 741-773.	2.2	6
78	Model order reduction of linear peridynamic systems using static condensation. <i>Mathematics and Mechanics of Solids</i> , 2021, 26, 552-569.	2.4	6
79	Peridynamic Formulation for Higher-Order Plate Theory. <i>Journal of Peridynamics and Nonlocal Modeling</i> , 2021, 3, 185-210.	2.9	6
80	Peridynamic formulation for higher order functionally graded beams. <i>Thin-Walled Structures</i> , 2021, 160, 107343.	5.3	6
81	Evaluation of stress intensity factors under thermal effect employing domain integral method and ordinary state based peridynamic theory. <i>Continuum Mechanics and Thermodynamics</i> , 2023, 35, 1021-1040.	2.2	6
82	Experimental investigation on a towing assessment for a floating desalination plant for Egypt. <i>Ocean Engineering</i> , 2021, 238, 109746.	4.3	6
83	Peridynamic modelling of periodic microstructured materials. <i>Procedia Structural Integrity</i> , 2020, 28, 820-828.	0.8	6
84	Static and dynamic mechanical behaviors of cracked Mindlin plates in ordinary state-based peridynamic framework. <i>Acta Mechanica</i> , 2022, 233, 299-316.	2.1	6
85	Experimental investigation on the influence of interceptor plate on the motion performance of a cylindrical FPSO. <i>Ocean Engineering</i> , 2022, 243, 110339.	4.3	6
86	Thermomechanical phase change peridynamic model for welding analysis. <i>Engineering Analysis With Boundary Elements</i> , 2022, 140, 371-385.	3.7	6
87	Mechanical and acoustic performance prediction model for elastomers in different environmental conditions. <i>Journal of the Acoustical Society of America</i> , 2018, 144, 2269-2280.	1.1	5
88	Peridynamic modelling of higher order functionally graded plates. <i>Mathematics and Mechanics of Solids</i> , 2021, 26, 1737-1759.	2.4	5
89	Modelling of Eulerian incompressible fluid flows by using peridynamic differential operator. <i>Ocean Engineering</i> , 2021, 239, 109815.	4.3	5
90	Some analytical solutions to peridynamic beam equations. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2022, 102, .	1.6	5

#	ARTICLE	IF	CITATIONS
91	Peridynamic computational homogenization theory for materials with evolving microstructure and damage. <i>Engineering With Computers</i> , 2023, 39, 2945-2957.	6.1	5
92	A Novel Moisture Diffusion Modeling Approach Using Finite Element Analysis. <i>Electronics (Switzerland)</i> , 2018, 7, 438.	3.1	4
93	Investigation of the effect of shape of inclusions on homogenized properties by using peridynamics. <i>Procedia Structural Integrity</i> , 2020, 28, 1094-1105.	0.8	4
94	Peridynamics for geometrically nonlinear analysis of three-dimensional beam structures. <i>Engineering Analysis With Boundary Elements</i> , 2021, 126, 68-92.	3.7	4
95	Ordinary state-based peridynamic shell model with arbitrary horizon domains for surface effect correction. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, 115, 103068.	4.7	4
96	Environmentally-driven design of a floating desalination platform (Case study: reverse osmosis) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54</i>	1.9	4
97	Probabilistic ship corrosion wastage model with Bayesian inference. <i>Ocean Engineering</i> , 2022, 246, 110571.	4.3	4
98	A Review of Nondestructive Examination Methods for New-building Ships Undergoing Classification Society Survey. <i>Journal of Ship Production and Design</i> , 2018, 34, 9-19.	0.4	3
99	Updating the Distributions of Uncertain Parameters Involved in Fatigue Analysis. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 778.	2.6	3
100	A Novel Peridynamic Mindlin Plate Formulation Without Limitation on Material Constants. <i>Journal of Peridynamics and Nonlocal Modeling</i> , 2021, 3, 287-306.	2.9	3
101	Vessel relocation solution for steel catenary riser touch down fatigue management. <i>Ocean Engineering</i> , 2021, 237, 109632.	4.3	3
102	Peridynamic shell membrane formulation. <i>Procedia Structural Integrity</i> , 2020, 28, 411-417.	0.8	3
103	Peridynamic formulation for Timoshenko beam. <i>Procedia Structural Integrity</i> , 2020, 28, 464-471.	0.8	3
104	Experimental investigation of motion behavior in irregular wave and site selection analysis of a hybrid offshore renewable power station for Egypt. <i>Ocean Engineering</i> , 2022, 249, 110858.	4.3	3
105	Closed-form dispersion relationships in bond-based peridynamics. <i>Procedia Structural Integrity</i> , 2020, 28, 482-490.	0.8	2
106	Two-dimensional finite-difference time-domain formulation for sound propagation in a temperature-dependent elastomer-fluid medium. <i>Journal of the Acoustical Society of America</i> , 2020, 147, 428-445.	1.1	2
107	Application of peridynamics for rock mechanics and porous media. , 2021, , 387-401.		2
108	Peridynamic modelling of Hertzian indentation fracture. <i>Procedia Structural Integrity</i> , 2020, 28, 1559-1571.	0.8	2

#	ARTICLE	IF	CITATIONS
109	Equivalent acceleration assessment of JEDEC moisture sensitivity levels using peridynamics. , 2015, , .		1
110	Effect of horizon shape in peridynamics. Procedia Structural Integrity, 2020, 28, 418-429.	0.8	1
111	Peridynamic Mindlin Plate Formulation for Functionally Graded Materials. Journal of Composites Science, 2020, 4, 76.	3.0	1
112	Modeling inelasticity in peridynamics. , 2021, , 205-221.		1
113	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
114	Floating catenary riser system concept for brownfield application. Ocean Engineering, 2021, 236, 109549.	4.3	1
115	Vessel relocation strategy for multiple steel catenary riser fatigue damage mitigation. Ocean Engineering, 2022, 248, 110493.	4.3	1
116	Peridynamic Modelling of Propagation of Cracks in Photovoltaic Panels. Procedia Structural Integrity, 2022, 41, 305-316.	0.8	1
117	Peridynamics in dynamic fracture modeling. , 2021, , 159-181.		0
118	Application of artificial intelligence and machine learning in peridynamics. , 2021, , 419-435.		0
119	Investigation of the effect of porosity on intergranular brittle fracture using peridynamics. Procedia Structural Integrity, 2020, 28, 472-481.	0.8	0
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