

Patrick W Dondl

List of Publications by Year in descending order

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papers

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840776

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g-index

49
all docs

49
docs citations

49
times ranked

304
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of Bone Scaffold Porosity Distributions. <i>Scientific Reports</i> , 2019, 9, 9170.	3.3	51
2	Lamination microstructure in shear deformed copper single crystals. <i>Acta Materialia</i> , 2009, 57, 3439-3449.	7.9	48
3	Lipschitz percolation. <i>Electronic Communications in Probability</i> , 2010, 15, .	0.4	22
4	Confined Elastic Curves. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 2205-2226.	1.8	18
5	Phase Field Models for Thin Elastic Structures with Topological Constraint. <i>Archive for Rational Mechanics and Analysis</i> , 2017, 223, 693-736.	2.4	18
6	Integrated additive design and manufacturing approach for the bioengineering of bone scaffolds for favorable mechanical and biological properties. <i>Biomedical Materials (Bristol)</i> , 2019, 14, 065002.	3.3	18
7	Pinning of interfaces in random media. <i>Interfaces and Free Boundaries</i> , 2011, 13, 411-421.	0.8	16
8	Twist-to-bend ratio: an important selective factor for many rod-shaped biological structures. <i>Scientific Reports</i> , 2019, 9, 17182.	3.3	14
9	A gradient system with a wiggly energy and relaxed EDP-convergence. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2019, 25, 68.	1.3	13
10	Modeling and simulation of martensitic phase transitions with a triple point. <i>Journal of the Mechanics and Physics of Solids</i> , 2004, 52, 2057-2077.	4.8	12
11	Relaxation of the single-slip condition in strain-gradient plasticity. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140098.	2.1	11
12	Effective behavior of an interface propagating through a periodic elastic medium. <i>Interfaces and Free Boundaries</i> , 2016, 18, 91-113.	0.8	8
13	Enabling technologies towards personalization of scaffolds for large bone defect regeneration. <i>Current Opinion in Biotechnology</i> , 2022, 74, 263-270.	6.6	8
14	Computational analysis of martensitic thin films using subdivision surfaces. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 72, 72-94.	2.8	6
15	A Sharp Interface Model for the Propagation of Martensitic Phase Boundaries. <i>Archive for Rational Mechanics and Analysis</i> , 2010, 197, 599-617.	2.4	6
16	Influence of structural reinforcements on the twist-to-bend ratio of plant axes: a case study on <i>Carex pendula</i> . <i>Scientific Reports</i> , 2021, 11, 21232.	3.3	6
17	Ballistic and sub-ballistic motion of interfaces in a field of random obstacles. <i>Annals of Applied Probability</i> , 2017, 27, .	1.3	5
18	Approximation of Integral Fractional Laplacian and Fractional PDEs via sinc-Basis. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, A2897-A2922.	2.8	5

#	ARTICLE	IF	CITATIONS
19	Energy Estimates, Relaxation, and Existence for Strain-Gradient Plasticity with Cross-Hardening. Lecture Notes in Applied and Computational Mechanics, 2015, , 157-173.	2.2	5
20	Positive speed of propagation in a semilinear parabolic interface model with unbounded random coefficients. Networks and Heterogeneous Media, 2012, 7, 137-150.	1.1	5
21	A Phase Field Model for the Optimization of the Willmore Energy in the Class of Connected Surfaces. SIAM Journal on Mathematical Analysis, 2014, 46, 1610-1632.	1.9	4
22	Microstructure in Plasticity, a Comparison between Theory and Experiment. Lecture Notes in Applied and Computational Mechanics, 2015, , 205-218.	2.2	4
23	Optimization of the branching pattern in coherent phase transitions. Comptes Rendus Mathematique, 2016, 354, 639-644.	0.3	4
24	Uniform regularity and convergence of phase-fields for Willmore's energy. Calculus of Variations and Partial Differential Equations, 2017, 56, 1.	1.7	4
25	Simultaneous elastic shape optimization for a domain splitting in bone tissue engineering. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180718.	2.1	4
26	A Phase-field Approximation of the Perimeter under a Connectedness Constraint. SIAM Journal on Mathematical Analysis, 2019, 51, 3902-3920.	1.9	4
27	Charting the twist-to-bend ratio of plant axes. Journal of the Royal Society Interface, 2022, 19, .	3.4	4
28	Optimal energy scaling for a shear experiment in single-crystal plasticity with cross-hardening. Zeitschrift Fur Angewandte Mathematik Und Physik, 2014, 65, 1011-1030.	1.4	3
29	Pinning of interfaces in a random elastic medium and logarithmic lattice embeddings in percolation. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2015, 145, 481-512.	1.2	3
30	The Effect of Forest Dislocations on the Evolution of a Phase-Field Model for Plastic Slip. Archive for Rational Mechanics and Analysis, 2019, 232, 65-119.	2.4	3
31	On the existence of minimisers for strain-gradient single-crystal plasticity. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 431-447.	1.6	2
32	Pinning of interfaces by localized dry friction. Journal of Differential Equations, 2020, 269, 7356-7381.	2.2	2
33	Linearization and computation for large-strain visco-elasticity. Mathematics in Engineering, 2022, 5, 1-15.	0.9	2
34	Uniform convergence guarantees for the deep Ritz method for nonlinear problems. , 2022, 2022, .		2
35	The effect of precipitates on the evolution of a martensitic phase boundary. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1151207-1151208.	0.2	1
36	Modeling transformation paths of multiphase materials: The triple point of zirconia. Physical Review B, 2009, 79, .	3.2	1

#	ARTICLE	IF	CITATIONS
37	A Bound on the Pseudospectrum for a Class of Non-normal Schrödinger Operators. Applied Mathematics Research Express, 0, , .	1.0	1
38	Bounds on precipitate hardening of line and surface defects in solids. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1.	1.4	1
39	Pinning of interfaces in a random medium with zero mean. Interfaces and Free Boundaries, 2021, 23, 305-321.	0.8	1
40	Threshold phenomenon for homogenized fronts in random elastic media. Discrete and Continuous Dynamical Systems - Series S, 2021, 14, 353-372.	1.1	1
41	Numerical and analytical aspects of the pinning of martensitic phase boundaries. GAMM Mitteilungen, 2011, 34, 118-123.	5.5	0
42	Relaxation of the Non-Convex, Incremental Energy-Minimization Problem in Single-Slip Strain-Gradient Plasticity. Key Engineering Materials, 2015, 651-653, 963-968.	0.4	0
43	On the boundary regularity of phase-fields for Willmore's energy. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2019, 149, 1017-1035.	1.2	0
44	Mini-Workshop: Inelastic and Non-equilibrium Material Behavior: from Atomistic Structure to Macroscopic Constitutive Relations. Oberwolfach Reports, 2014, 10, 3147-3188.	0.0	0
45	Surface lattice Green's functions for high-entropy alloys. Modelling and Simulation in Materials Science and Engineering, 0, , .	2.0	0
46	Keeping it together: A phase-field version of path-connectedness and its implementation. Journal of Algorithms and Computational Technology, 2021, 15, 174830262110543.	0.7	0
47	Infinite pinning. Bulletin of the London Mathematical Society, 0, , .	0.8	0
48	A Proof of Taylor Scaling for Curvature-Driven Dislocation Motion Through Random Arrays of Obstacles. Archive for Rational Mechanics and Analysis, 2022, 244, 317.	2.4	0
49	An Efficient Model For Scaffold Mediated Bone Regeneration. SIAM Journal on Applied Mathematics, 2022, 82, 924-949.	1.8	0