Khanh Chau Le

List of Publications by Year in Descending Order

99 papers	**1,242** citations	**21** h-index	**31** g-index
105 ext. papers	**1,322** ext. citations	**3.3** avg, IF	**5.3** L-index

#	Paper	IF	Citations
99	Thermodynamic dislocation theory: application to bcc-crystals. *Modelling and Simulation in Materials Science and Engineering*, **2021**, 29, 015003	2	1
98	Dislocation impediment by the grain boundaries in polycrystals. *Acta Mechanica*, **2021**, 232, 3193-3213	2.1	1
97	Plane constrained shear of single crystals. *Archive of Applied Mechanics*, **2021**, 91, 2109-2126	2.2	2
96	Safe equilibrium and crack growth in inhomogeneous materials as a variational problem. *Engineering Fracture Mechanics*, **2021**, 256, 107960	4.2	
95	Two universal laws for plastic flows and the consistent thermodynamic dislocation theory. *Mechanics Research Communications*, **2020**, 109, 103597	2.2	8
94	Asymptotically exact theory of fiber-reinforced composite beams. *Composite Structures*, **2020**, 244, 112279	7.3	
93	Scaling confirmation of the thermodynamic dislocation theory. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 29431-29434	11.5	10
92	Averaging in dislocation mediated plasticity. *International Journal of Engineering Science*, **2020**, 149, 103230	5.7	6
91	Thermal softening during high-temperature torsional deformation of aluminum bars. *International Journal of Engineering Science*, **2019**, 137, 1-7	5.7	5
90	Thermodynamic dislocation theory: Finite deformations. *International Journal of Engineering Science*, **2019**, 139, 1-10	5.7	6
89	Introduction to the Special Issue in honor of Konstantin Lurie. *Archive of Applied Mechanics*, **2019**, 89, 403-407	2.2	
88	High-temperature torsion of aluminum bars. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900005	0.2	
87	Kinematic hardening and Bauschinger effect. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900011	0.2	2
86	Size effect caused by excess dislocations in twisted micro-wires. *Proceedings in Applied Mathematics and Mechanics*, **2019**, 19, e201900012	0.2	
85	Non-uniform plastic deformations of crystals undergoing anti-plane constrained shear. *Archive of Applied Mechanics*, **2019**, 89, 467-483	2.2	
84	Thermodynamic dislocation theory: Size effect in torsion. *International Journal of Plasticity*, **2019**, 115, 56-70	7.6	15
83	Thermodynamic dislocation theory of adiabatic shear banding in steel. *Scripta Materialia*, **2018**, 149, 62-65	5.6	45

82	Thermodynamic dislocation theory: Bauschinger effect. *Physical Review E*, **2018**, 97, 043002	2.4	11
81	A Single Crystal Beam Bent in Double Slip. *Advanced Structured Materials*, **2018**, 223-246	0.6	0
80	Thermodynamic dislocation theory for non-uniform plastic deformations. *Journal of the Mechanics and Physics of Solids*, **2018**, 111, 157-169	5	33
79	Thermodynamic dislocation theory: Torsion of bars. *Physical Review E*, **2018**, 98,	2.4	4
78	An asymptotically exact theory of functionally graded piezoelectric shells. *International Journal of Engineering Science*, **2017**, 112, 42-62	5.7	31
77	Optimal parameters uncoupling vibration modes of oscillators. *Journal of Sound and Vibration*, **2017**, 400, 122-133	3.9	2
76	Elektro-Bergrettungsfahrzeug mit innovativem Fahrwerk. *ATZoffhighway*, **2017**, 10, 36-41		
75	Electrical Mountain Rescue Vehicle with Innovative Suspension. *ATZoffhighway Worldwide*, **2017**, 10, 36-41		1
74	Thermodynamic dislocation theory of high-temperature deformation in aluminum and steel. *Physical Review E*, **2017**, 96, 013004	2.4	38
73	Dislocation mediated plastic flow in aluminum: Comparison between theory and experiment. *International Journal of Engineering Science*, **2017**, 119, 50-54	5.7	13
72	Numerical solution of plane constrained shear problem for single crystals within continuum dislocation theory. *Proceedings in Applied Mathematics and Mechanics*, **2017**, 17, 475-476	0.2	
71	Three-dimensional continuum dislocation theory. *International Journal of Plasticity*, **2016**, 76, 213-230	7.6	14
70	Continuum dislocation theory accounting for redundant dislocations and Taylor hardening. *International Journal of Engineering Science*, **2016**, 106, 155-167	5.7	10
69	Distribution of dislocations in twisted bars. *International Journal of Plasticity*, **2016**, 83, 110-125	7.6	10
68	Self-energy of dislocations and dislocation pileups. *International Journal of Engineering Science*, **2016**, 100, 1-7	5.7	4
67	An asymptotically exact theory of smart sandwich shells. *International Journal of Engineering Science*, **2016**, 106, 179-198	5.7	19
66	Stress and dislocation distributions near a crack tip in ductile single crystals. *International Journal of Engineering Science*, **2016**, 102, 4-11	5.7	7
65	Formation of grains and dislocation structure of geometrically necessary boundaries. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 643, 12-16	5.3	5

64	Dislocation structure during microindentation. *International Journal of Engineering Science*, **2015**, 94, 195-211	5.7	13
63	Amplitude modulation of water waves governed by Boussinesq's equation. *Nonlinear Dynamics*, **2015**, 81, 659-666	5	14
62	Formation of grain boundaries in ductile single crystals at finite plastic deformations. *International Journal of Plasticity*, **2015**, 69, 134-151	7.6	18
61	Martensitic phase transition involving dislocations. *Journal of the Mechanics and Physics of Solids*, **2015**, 79, 67-79	5	6
60	Dislocation Structure of Grain Boundaries in Single Crystals Deforming in Simple Shear. *Proceedings in Applied Mathematics and Mechanics*, **2015**, 15, 319-320	0.2	
59	Slope modulation of ring waves governed by two-dimensional sine-Gordon equation. *Wave Motion*, **2015**, 55, 84-88	1.8	3
58	Energy Methods in Dynamics. *Interaction of Mechanics and Mathematics*, **2014**,	9	7
57	Optimisation of Roll Vibration Damping of a Vehicle. *ATZ Worldwide*, **2014**, 116, 62-67	0.1	1
56	Damping of roll vibrations of vehicle suspension. *Vehicle System Dynamics*, **2014**, 52, 562-579	2.8	6
55	A thermodynamically consistent model of static and dynamic recrystallization. *Archive of Applied Mechanics*, **2014**, 84, 1441-1451	2.2	0
54	Amplitude modulation of waves governed by Korteweg-de Vries equation. *International Journal of Engineering Science*, **2014**, 83, 117-123	5.7	11
53	Application of nonlinear continuum dislocation theory to antiplane shear. *Proceedings in Applied Mathematics and Mechanics*, **2014**, 14, 541-542	0.2	
52	Nonlinear continuum dislocation theory revisited. *International Journal of Plasticity*, **2014**, 53, 164-178	7.6	37
51	Slope modulation of waves governed by sine-Gordon equation. *Communications in Nonlinear Science and Numerical Simulation*, **2013**, 18, 1563-1567	3.7	8
50	On bending of single crystal beam with continuously distributed dislocations. *International Journal of Plasticity*, **2013**, 48, 152-167	7.6	21
49	Polygonization: Theory and comparison with experiments. *International Journal of Engineering Science*, **2012**, 59, 211-218	5.7	23
48	On torsion of a single crystal rod. *International Journal of Plasticity*, **2011**, 27, 460-469	7.6	29
47	Polygonization as low energy dislocation structure. *Continuum Mechanics and Thermodynamics*, **2010**, 22, 291-298	3.5	13

46	Are plastic yielding and work hardening sensitive to the boundary conditions?. *Proceedings in Applied Mathematics and Mechanics*, **2010**, 10, 331-332	0.2	
45	An Energetic Approach to Deformation Twinning. *IUTAM Symposium on Cellular, Molecular and Tissue Mechanics*, **2010**, 141-155	0.3	
44	Plastic Deformation of Bicrystals Within Continuum Dislocation Theory. *Mathematics and Mechanics of Solids*, **2009**, 14, 540-563	2.3	21
43	A simple model for dynamic recrystallization during severe plastic deformation. *Archive of Applied Mechanics*, **2009**, 79, 579-586	2.2	12
42	Plane constrained uniaxial extension of a single crystal strip. *International Journal of Plasticity*, **2009**, 25, 1950-1969	7.6	17
41	Plane constrained uniaxial extension of a single crystal strip. *Proceedings in Applied Mathematics and Mechanics*, **2009**, 9, 311-312	0.2	
40	A continuum model for initiation and evolution of deformation twinning. *Journal of the Mechanics and Physics of Solids*, **2009**, 57, 987-1002	5	32
39	Plastic yielding and work hardening of single crystals in a soft device. *Comptes Rendus - Mecanique*, **2009**, 337, 709-715	2.1	1
38	Dislocation pile-ups in bicrystals within continuum dislocation theory. *International Journal of Plasticity*, **2008**, 24, 2125-2147	7.6	36
37	Analytical solution of plane constrained shear problem for single crystals within continuum dislocation theory. *Archive of Applied Mechanics*, **2008**, 78, 587-597	2.2	34
36	Plastic deformation of bicrystals within continuum dislocation theory. *Proceedings in Applied Mathematics and Mechanics*, **2008**, 8, 10435-10436	0.2	
35	Plane constrained shear of single crystal strip with one and two active slip systems. *Proceedings in Applied Mathematics and Mechanics*, **2008**, 8, 10463-10464	0.2	
34	Plane constrained shear of single crystal strip with two active slip systems. *Journal of the Mechanics and Physics of Solids*, **2008**, 56, 2541-2554	5	28
33	Periodic debonding of an adhesive film. *Comptes Rendus - Mecanique*, **2008**, 336, 170-175	2.1	1
32	Dislocation nucleation and work hardening in anti-plane constrained shear. *Continuum Mechanics and Thermodynamics*, **2007**, 18, 455-467	3.5	30
31	On kinetics of hysteresis. *Continuum Mechanics and Thermodynamics*, **2006**, 18, 335-342	3.5	3
30	Estimation of crack density due to fragmentation of brittle ellipsoidal inhomogeneities embedded in a ductile matrix. *Archive of Applied Mechanics*, **2005**, 74, 439-448	2.2	4
29	On The Microcrack Nucleation In Brittle Solids. *International Journal of Fracture*, **2005**, 133, L47-L54	2.3	4

28	Estimation of crack density due to fragmentation of brittle ellipsoidal inhomogeneities. *Proceedings in Applied Mathematics and Mechanics*, **2005**, 5, 339-340	0.2	
27	Microcrack nucleation in brittle solids. *Proceedings in Applied Mathematics and Mechanics*, **2005**, 5, 343-344	0.2	
26	Variational problems of crack equilibrium and crack propagation **2004**, 53-81		1
25	Driving force acting on a running crack. *Proceedings in Applied Mathematics and Mechanics*, **2002**, 1, 24	0.2	
24	Theory of charge nucleation in two dimensions. *Physical Review E*, **2002**, 66, 026129	2.4	5
23	Energy Distribution in a Neutral Gas of Point Vortices. *Journal of Statistical Physics*, **2001**, 104, 881-892	1.5	8
22	Determination of the driving force acting on a kinked crack. *Archive of Applied Mechanics*, **1999**, 69, 337-344	2.2	31
21	Vibrations of Shells and Rods **1999**,		35
20	Strain measures, integrability condition and frame indifference in the theory of oriented media. *International Journal of Solids and Structures*, **1998**, 35, 783-798	3.1	17
19	Dissipative driving force in ductile crystals and the strain localization phenomenon. *International Journal of Plasticity*, **1998**, 14, 1109-1131	7.6	7
18	High frequency vibrations and wave propagation in elastic shells: Variational-asymptotic approach. *International Journal of Solids and Structures*, **1997**, 34, 3923-3939	3.1	8
17	On the determination of the crystal reference in nonlinear continuum theory of dislocations. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **1996**, 452, 359-371	2.4	42
16	Nonlinear continuum theory of dislocations. *International Journal of Engineering Science*, **1996**, 34, 339-358	3.7	55
15	A model of elastoplastic bodies with continuously distributed dislocations. *International Journal of Plasticity*, **1996**, 12, 611-627	7.6	75
14	The singular elastostatic field due to a crack in rubberlike materials. *Journal of Elasticity*, **1993**, 32, 183-222	2.5	45
13	Constitutive equations for elastoplastic bodies at finite strain: thermodynamic implementation. *Acta Mechanica*, **1993**, 100, 155-170	2.1	34
12	ON THE SINGULAR ELASTOSTATIC FIELD INDUCED BY A CRACK IN A HADAMARD MATERIAL. *Quarterly Journal of Mechanics and Applied Mathematics*, **1992**, 45, 101-117	1	20
11	Variational Formulation of the Crack Problem for an Elastoplastic Body at Finite Strain. *ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik*, **1992**, 72, 387-396	1	23

LIST OF PUBLICATIONS

10	On bounding the effective conductivity of isotropic composite materials. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **1991**, 42, 614-622	1.6	14
9	On shakedown of elastoplastic shells. *Quarterly of Applied Mathematics*, **1991**, 49, 781-793	0.7	5
8	Variational principles of nonlinear fracture mechanics. *Acta Mechanica*, **1990**, 83, 25-37	2.1	53
7	Variational estimates of the effective thermal conductivities of transversely isotropic composites. *Journal of Engineering Physics*, **1990**, 59, 1245-1250		1
6	Variational principles of non-linear theory of brittle fracture. *Prikladnaya Matematika I Mekhanika*, **1990**, 54, 543-549		3
5	Variational Inequalities in Brittle Fracture Mechanics **1989**, 144-151		2
4	High-frequency longitudinal vibrations of elastic rods. *Prikladnaya Matematika I Mekhanika*, **1986**, 50, 335-341		5
3	The theory of piezoelectric shells. *Prikladnaya Matematika I Mekhanika*, **1986**, 50, 98-105		12
2	High-frequency long-wave shell vibration. *Prikladnaya Matematika I Mekhanika*, **1980**, 44, 520-525		5
1	Thermodynamic theory of dislocation/grain boundary interaction. *Continuum Mechanics and Thermodynamics*,1	3.5	0