

Kumbakonam R Rajagopal

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541
papers

16,403
citations

64
h-index

107
g-index

562
ext. papers

17,983
ext. citations

2.9
avg, IF

7.19
L-index

#	Paper	IF	Citations
541	A CONSTRAINED MIXTURE MODEL FOR GROWTH AND REMODELING OF SOFT TISSUES. <i>Mathematical Models and Methods in Applied Sciences</i> , 2002 , 12, 407-430	3.5	513
540	Fluids of differential type: Critical review and thermodynamic analysis. <i>International Journal of Engineering Science</i> , 1995 , 33, 689-729	5.7	432
539	Flow of a viscoelastic fluid over a stretching sheet. <i>Rheologica Acta</i> , 1984 , 23, 213-215	2.3	369
538	A thermodynamic frame work for rate type fluid models. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000 , 88, 207-227	2.7	352
537	On Implicit Constitutive Theories. <i>Applications of Mathematics</i> , 2003 , 48, 279-319		282
536	Mathematical modeling of electrorheological materials. <i>Continuum Mechanics and Thermodynamics</i> , 2001 , 13, 59-78	3.5	271
535	Anomalous features in the model of second order fluids. <i>Archive for Rational Mechanics and Analysis</i> , 1979 , 70, 145-152	2.3	252
534	Mechanics of Mixtures. <i>Series on Advances in Mathematics for Applied Sciences</i> , 1995 ,		246
533	An exact solution for the flow of a non-newtonian fluid past an infinite porous plate. <i>Meccanica</i> , 1984 , 19, 158-160	2.1	219
532	A theoretical model of enlarging intracranial fusiform aneurysms. <i>Journal of Biomechanical Engineering</i> , 2006 , 128, 142-9	2.1	216
531	A note on unsteady unidirectional flows of a non-Newtonian fluid. <i>International Journal of Non-Linear Mechanics</i> , 1982 , 17, 369-373	2.8	215
530	ON A HIERARCHY OF APPROXIMATE MODELS FOR FLOWS OF INCOMPRESSIBLE FLUIDS THROUGH POROUS SOLIDS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2007 , 17, 215-252	3.5	193
529	Theory of small on large: Potential utility in computations of fluid-solid interactions in arteries. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 196, 3070-3078	5.7	189
528	Exact solutions for some simple flows of an Oldroyd-B fluid. <i>Acta Mechanica</i> , 1995 , 113, 233-239	2.1	180
527	Intelligent cruise control systems and traffic flow stability. <i>Transportation Research Part C: Emerging Technologies</i> , 1999 , 7, 329-352	8.4	174
526	Mechanics of the inelastic behavior of materials. Part 1, theoretical underpinnings. <i>International Journal of Plasticity</i> , 1998 , 14, 945-967	7.6	171
525	A constitutive equation for nonlinear solids which undergo deformation induced microstructural changes. <i>International Journal of Plasticity</i> , 1992 , 8, 385-395	7.6	171

524	The elasticity of elasticity. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2007 , 58, 309-317	1.6	161
523	On the creeping flow of the second-order fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1984 , 15, 239-246	2.7	152
522	Start-up flows of second grade fluids in domains with one finite dimension. <i>International Journal of Non-Linear Mechanics</i> , 1995 , 30, 817-839	2.8	151
521	On flows of granular materials. <i>Continuum Mechanics and Thermodynamics</i> , 1994 , 6, 81-139	3.5	148
520	On implicit constitutive theories for fluids. <i>Journal of Fluid Mechanics</i> , 2006 , 550, 243	3.7	145
519	ON THE OBERBECK-BOUSSINESQ APPROXIMATION. <i>Mathematical Models and Methods in Applied Sciences</i> , 1996 , 06, 1157-1167	3.5	144
518	A note on the falkner-skam flows of a non-newtonian fluid. <i>International Journal of Non-Linear Mechanics</i> , 1983 , 18, 313-320	2.8	142
517	A constrained mixture model for arterial adaptations to a sustained step change in blood flow. <i>Biomechanics and Modeling in Mechanobiology</i> , 2003 , 2, 109-26	3.8	134
516	The effect of the slip boundary condition on the flow of fluids in a channel. <i>Acta Mechanica</i> , 1999 , 135, 113-126	2.1	128
515	On the uniqueness of flow of a Navier-Stokes fluid due to a stretching boundary. <i>Archive for Rational Mechanics and Analysis</i> , 1987 , 98, 385-393	2.3	127
514	A thermodynamic framework for the modeling of crystallizable shape memory polymers. <i>International Journal of Engineering Science</i> , 2008 , 46, 325-351	5.7	125
513	On the response of non-dissipative solids. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2007 , 463, 357-367	2.4	118
512	Mechanics of the inelastic behavior of materials. Part II: inelastic response. <i>International Journal of Plasticity</i> , 1998 , 14, 969-995	7.6	117
511	The flow of blood in tubes: theory and experiment. <i>Mechanics Research Communications</i> , 1998 , 25, 257-262		116
510	On a class of non-dissipative materials that are not hyperelastic. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2009 , 465, 493-500	2.4	113
509	Flow of viscoelastic fluids between rotating disks. <i>Theoretical and Computational Fluid Dynamics</i> , 1992 , 3, 185-206	2.3	113
508	Review of the uses and modeling of bitumen from ancient to modern times. <i>Applied Mechanics Reviews</i> , 2003 , 56, 149-214	8.6	112
507	On thermomechanical restrictions of continua. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2004 , 460, 631-651	2.4	110

506	Simple flows of fluids with pressure-dependent viscosities. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2001 , 457, 1603-1622	2.4	108
505	On the thermomechanics of materials that have multiple natural configurations Part I: Viscoelasticity and classical plasticity. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2004 , 55, 861-893	1.6	107
504	On boundary conditions for a certain class of problems in mixture theory. <i>International Journal of Engineering Science</i> , 1986 , 24, 1453-1463	5.7	104
503	A single integral finite strain viscoelastic model of ligaments and tendons. <i>Journal of Biomechanical Engineering</i> , 1996 , 118, 221-6	2.1	103
502	On the modeling of electrorheological materials. <i>Mechanics Research Communications</i> , 1996 , 23, 401-407	2.2	102
501	A mathematical model for shear-induced hemolysis. <i>Artificial Organs</i> , 1995 , 19, 576-82	2.6	101
500	On the thermomechanics of shape memory wires. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 1999 , 50, 459	1.6	98
499	A Model Incorporating Some of the Mechanical and Biochemical Factors Underlying Clot Formation and Dissolution in Flowing Blood. <i>Journal of Theoretical Medicine</i> , 2003 , 5, 183-218		93
498	A model for the formation and lysis of blood clots. <i>Pathophysiology of Haemostasis and Thrombosis: International Journal on Haemostasis and Thrombosis Research</i> , 2005 , 34, 109-20		90
497	EXISTENCE AND REGULARITY OF SOLUTIONS AND THE STABILITY OF THE REST STATE FOR FLUIDS WITH SHEAR DEPENDENT VISCOSITY. <i>Mathematical Models and Methods in Applied Sciences</i> , 1995 , 05, 789-812	3.5	90
496	A note on the flow induced by a constantly accelerating plate in an Oldroyd-B fluid. <i>Applied Mathematical Modelling</i> , 2007 , 31, 647-654	4.5	88
495	On the mechanical behavior of asphalt. <i>Mechanics of Materials</i> , 2005 , 37, 1085-1100	3.3	88
494	An existence theorem for the flow of a non-newtonian fluid past an infinite porous plate. <i>International Journal of Non-Linear Mechanics</i> , 1986 , 21, 279-289	2.8	87
493	A study of strain-induced crystallization of polymers. <i>International Journal of Solids and Structures</i> , 2001 , 38, 1149-1167	3.1	86
492	Flow of a non-Newtonian fluid past a wedge. <i>Acta Mechanica</i> , 1991 , 88, 113-123	2.1	84
491	A thermodynamic framework for the study of crystallization in polymers. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2002 , 53, 365-406	1.6	82
490	Global Analysis of the Flows of Fluids with Pressure-Dependent Viscosities. <i>Archive for Rational Mechanics and Analysis</i> , 2002 , 165, 243-269	2.3	80
489	Flow of a fluid-solid mixture between flat plates. <i>Chemical Engineering Science</i> , 1991 , 46, 1713-1723	4.4	80

488	Navier's slip and evolutionary Navier-Stokes-like systems with pressure and shear-rate dependent viscosity. <i>Indiana University Mathematics Journal</i> , 2007 , 56, 51-86	0.6	79
487	Correction to On a new class of electroelastic bodies. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017 , 473,	2.4	78
486	A model for the formation, growth, and lysis of clots in quiescent plasma. A comparison between the effects of antithrombin III deficiency and protein C deficiency. <i>Journal of Theoretical Biology</i> , 2008 , 253, 725-38	2.3	78
485	Stagnation point flow of a non-newtonian fluid. <i>Mechanics Research Communications</i> , 1990 , 17, 415-421	2.2	75
484	Thermodynamic Framework for the Constitutive Modeling of Asphalt Concrete: Theory and Applications. <i>Journal of Materials in Civil Engineering</i> , 2004 , 16, 155-166	3	73
483	On the inelastic behavior of solids [Part 1: Twinning. <i>International Journal of Plasticity</i> , 1995 , 11, 653-678	7.6	69
482	On a class of exact solutions to the equations of motion of a second grade fluid. <i>International Journal of Engineering Science</i> , 1981 , 19, 1009-1014	5.7	68
481	Uniqueness and drag for fluids of second grade in steady motion. <i>International Journal of Non-Linear Mechanics</i> , 1978 , 13, 131-137	2.8	67
480	Modeling anisotropic fluids within the framework of bodies with multiple natural configurations. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2001 , 99, 109-124	2.7	66
479	On the shear and bending of a degrading polymer beam. <i>International Journal of Plasticity</i> , 2007 , 23, 1618-1636	7.6	65
478	On the nonlinear elastic response of bodies in the small strain range. <i>Acta Mechanica</i> , 2014 , 225, 1545-1553	5.3	63
477	Flow of an Oldroyd-B fluid due to a stretching sheet in the presence of a free stream velocity. <i>International Journal of Non-Linear Mechanics</i> , 1995 , 30, 391-405	2.8	63
476	Information flow and its relation to stability of the motion of vehicles in a rigid formation. <i>IEEE Transactions on Automatic Control</i> , 2006 , 51, 1315-1319	5.9	62
475	Longitudinal and torsional oscillations of a rod in a non-Newtonian fluid. <i>Acta Mechanica</i> , 1983 , 49, 281-285	2.5	60
474	Competition Between Radial Expansion and Thickening in the Enlargement of an Intracranial Saccular Aneurysm. <i>Journal of Elasticity</i> , 2005 , 80, 13-31	1.5	59
473	Flow of electro-rheological materials. <i>Acta Mechanica</i> , 1992 , 91, 57-75	2.1	59
472	Non-Linear Elastic Bodies Exhibiting Limiting Small Strain. <i>Mathematics and Mechanics of Solids</i> , 2011 , 16, 122-139	2.3	58
471	Flow of a non-Newtonian fluid between heated parallel plates. <i>International Journal of Non-Linear Mechanics</i> , 1985 , 20, 91-101	2.8	58

- 470 Applications of the theory of interacting continua to the diffusion of a fluid through a non-linear elastic media. *International Journal of Engineering Science*, **1981**, 19, 871-889 5.7 58
- 469 On the flow of a simple fluid in an orthogonal rheometer. *Archive for Rational Mechanics and Analysis*, **1982**, 79, 39-47 2.3 58
- 468 Modeling fracture in the context of a strain-limiting theory of elasticity: a single anti-plane shear crack. *International Journal of Fracture*, **2011**, 169, 39-48 2.3 56
- 467 Mathematical Analysis of Unsteady Flows of Fluids with Pressure, Shear-Rate, and Temperature Dependent Material Moduli that Slip at Solid Boundaries. *SIAM Journal on Mathematical Analysis*, **2009**, 41, 665-707 1.7 56
- 466 On the thermodynamics of fluids defined by implicit constitutive relations. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2008**, 59, 715-729 1.6 56
- 465 Modeling the response of nonlinear viscoelastic biodegradable polymeric stents. *International Journal of Solids and Structures*, **2012**, 49, 989-1000 3.1 55
- 464 A note on the flow of a Burgers fluid in an orthogonal rheometer. *International Journal of Engineering Science*, **2004**, 42, 1973-1985 5.7 55
- 463 Swirling flow between rotating plates. *Archive for Rational Mechanics and Analysis*, **1984**, 86, 305-315 2.3 55
- 462 Natural convection flow of a non-Newtonian fluid between two vertical flat plates. *Acta Mechanica*, **1985**, 54, 239-246 2.1 55
- 461 Identification of elastic properties of homogeneous, orthotropic vascular segments in distension. *Journal of Biomechanics*, **1995**, 28, 501-12 2.9 54
- 460 On the Oberbeck-Boussinesq approximation for fluids with pressure dependent viscosities. *Nonlinear Analysis: Real World Applications*, **2009**, 10, 1139-1150 2.1 53
- 459 Deformation-induced hydrolysis of a degradable polymeric cylindrical annulus. *Biomechanics and Modeling in Mechanobiology*, **2010**, 9, 177-86 3.8 53
- 458 Mathematical Issues Concerning the Navier-Stokes Equations and Some of Its Generalizations. *Handbook of Differential Equations: Evolutionary Equations*, **2005**, 2, 371-459 52
- 457 On an inconsistency in the derivation of the equations of elastohydrodynamic lubrication. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2003**, 459, 2771-2786 2.4 52
- 456 Flow of a fluid infused with solid particles through a pipe. *International Journal of Engineering Science*, **1991**, 29, 649-661 5.7 52
- 455 A Gibbs-potential-based formulation for obtaining the response functions for a class of viscoelastic materials. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2011**, 467, 39-58 2.4 50
- 454 On the development and generalizations of Cahn-Hilliard equations within a thermodynamic framework. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2012**, 63, 145-169 1.6 49
- 453 Inelastic behavior of materials. Part II. Energetics associated with discontinuous deformation twinning. *International Journal of Plasticity*, **1997**, 13, 1-35 7.6 49

452	Diffusion through polymeric solids undergoing large deformations. <i>Materials Science and Technology</i> , 2003 , 19, 1175-1180	1.5	49
451	Towards an understanding of the mechanics underlying aortic dissection. <i>Biomechanics and Modeling in Mechanobiology</i> , 2007 , 6, 345-59	3.8	48
450	Some nonlinear diffusion problems within the context of the theory of interacting continua. <i>International Journal of Engineering Science</i> , 1987 , 25, 1441-1457	5.7	48
449	Flow and stability of a second grade fluid between two parallel plates rotating about noncoincident axes. <i>International Journal of Engineering Science</i> , 1981 , 19, 1401-1409	5.7	48
448	The flow of a second order fluid between rotating parallel plates. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1981 , 9, 185-190	2.7	48
447	A new development and interpretation of the Navier-Stokes fluid which reveals why the Stokes assumption is inapt. <i>International Journal of Non-Linear Mechanics</i> , 2013 , 50, 141-151	2.8	46
446	Solutions of some simple boundary value problems within the context of a new class of elastic materials. <i>International Journal of Non-Linear Mechanics</i> , 2011 , 46, 376-386	2.8	46
445	Asymmetric flow between parallel rotating disks. <i>Journal of Fluid Mechanics</i> , 1984 , 146, 203-225	3.7	46
444	Remarks on the modeling of fluidized systems. <i>AIChE Journal</i> , 1992 , 38, 471-472	3.6	45
443	Anti-plane stress state of a plate with a V-notch for a new class of elastic solids. <i>International Journal of Fracture</i> , 2013 , 179, 59-73	2.3	43
442	On steady flows of fluids with pressure- and shear-dependent viscosities. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005 , 461, 651-670	2.4	43
441	Biodegradable Stents: Biomechanical Modeling Challenges and Opportunities. <i>Cardiovascular Engineering and Technology</i> , 2010 , 1, 52-65	2.2	42
440	A Diagnostic System for Air Brakes in Commercial Vehicles. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2006 , 7, 360-376	6.1	42
439	Flow of fluids with pressure- and shear-dependent viscosity down an inclined plane. <i>Journal of Fluid Mechanics</i> , 2012 , 706, 173-189	3.7	41
438	Modeling the Pneumatic Subsystem of an S-cam Air Brake System. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2004 , 126, 36-46	1.6	41
437	On the thermomechanics of materials that have multiple natural configurations. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2004 , 55, 1074-1093	1.6	41
436	Remarks on the notion of "pressure" <i>International Journal of Non-Linear Mechanics</i> , 2015 , 71, 165-172	2.8	40
435	Global existence of solutions for flows of fluids with pressure and shear dependent viscosities. <i>Applied Mathematics Letters</i> , 2002 , 15, 961-967	3.5	40

- 434 On the nature of constraints for continua undergoing dissipative processes. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2005**, 461, 2785-2795 2.4 39
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- 431 A thermomechanical framework for modeling the compaction of asphalt mixes. *Mechanics of Materials*, **2008**, 40, 846-864 3.3 38
- 430 Flows of Incompressible Fluids subject to Navier-Slip on the boundary. *Computers and Mathematics With Applications*, **2008**, 56, 2128-2143 2.7 37
- 429 Lubrication With Binary Mixtures: Liquid-Liquid Emulsion. *Journal of Tribology*, **1993**, 115, 46-55 1.8 37
- 428 A thermodynamical framework for chemically reacting systems. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2011**, 62, 331-363 1.6 35
- 427 Some simple flows of a Johnson-Segalman fluid. *Acta Mechanica*, **1999**, 132, 209-219 2.1 35
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- 425 New exact solutions in non-linear elasticity. *International Journal of Engineering Science*, **1985**, 23, 217-234 3.7 35
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- 423 Modeling fracture in the context of a strain-limiting theory of elasticity: A single plane-strain crack. *International Journal of Engineering Science*, **2015**, 88, 73-82 5.7 34
- 422 A thermodynamic basis for the derivation of the Darcy, Forchheimer and Brinkman models for flows through porous media and their generalizations. *International Journal of Non-Linear Mechanics*, **2014**, 58, 162-166 2.8 34
- 421 Flow through porous media due to high pressure gradients. *Applied Mathematics and Computation*, **2008**, 199, 748-759 2.7 34
- 420 A continuum model for the creep of single crystal nickel-base superalloys. *Acta Materialia*, **2005**, 53, 669-679 3.4 34
- 419 A note on a reappraisal and generalization of the Kelvin-Voigt model. *Mechanics Research Communications*, **2009**, 36, 232-235 2.2 33
- 418 Generalizations of the Navier-Stokes fluid from a new perspective. *International Journal of Engineering Science*, **2010**, 48, 1907-1924 5.7 33
- 417 Numerical simulations and global existence of solutions of two-dimensional flows of fluids with pressure- and shear-dependent viscosities. *Mathematics and Computers in Simulation*, **2003**, 61, 297-315 3.3 33

4 ¹⁶	On Fully Developed Flows of Fluids with a Pressure Dependent Viscosity in a Pipe. <i>Applications of Mathematics</i> , 2005 , 50, 341-353		33
4 ¹⁵	On the fully developed flow of a dense particulate mixture in a pipe. <i>Powder Technology</i> , 1999 , 104, 258-268		33
4 ¹⁴	On the modeling of inhomogeneous incompressible fluid-like bodies. <i>Mechanics of Materials</i> , 2006 , 38, 233-242	3.3	32
4 ¹³	On a new class of electroelastic bodies. I. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2013 , 469, 20120521	2.4	31
4 ¹²	A new class of quasi-linear models for describing the nonlinear viscoelastic response of materials. <i>Acta Mechanica</i> , 2013 , 224, 2169-2183	2.1	31
4 ¹¹	A numerical study of fluids with pressure-dependent viscosity flowing through a rigid porous medium. <i>International Journal for Numerical Methods in Fluids</i> , 2011 , 67, 342-368	1.9	31
4 ¹⁰	Triaxial testing and stress relaxation of asphalt concrete. <i>Mechanics of Materials</i> , 2004 , 36, 849-864	3.3	31
4 ⁰⁹	On constitutive equations for electrorheological materials. <i>Continuum Mechanics and Thermodynamics</i> , 1995 , 7, 1-22	3.5	31
4 ⁰⁸	Lubrication With Binary Mixtures: Bubbly Oil. <i>Journal of Tribology</i> , 1993 , 115, 253-260	1.8	31
4 ⁰⁷	Circular shearing and torsion of generalized neo-Hookean materials. <i>IMA Journal of Applied Mathematics</i> , 1992 , 48, 23-37	1	31
4 ⁰⁶	On Maxwell fluids with relaxation time and viscosity depending on the pressure. <i>International Journal of Non-Linear Mechanics</i> , 2011 , 46, 819-827	2.8	30
4 ⁰⁵	A thermomechanical framework for the glass transition phenomenon in certain polymers and its application to fiber spinning. <i>Journal of Rheology</i> , 2002 , 46, 977	4.1	30
4 ⁰⁴	Steady flows of non-Newtonian fluids past a porous plate with suction or injection. <i>International Journal for Numerical Methods in Fluids</i> , 1993 , 17, 927-941	1.9	30
4 ⁰³	On the conditional stability of the rest state of a fluid of second grade in unbounded domains. <i>Archive for Rational Mechanics and Analysis</i> , 1990 , 109, 173-182	2.3	30
4 ⁰²	A review of mathematical models for the flow of traffic and some recent results. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2008 , 69, 950-970	1.3	29
4 ⁰¹	Analysis of Squeeze Film Dampers Operating With Bubbly Lubricants. <i>Journal of Tribology</i> , 2000 , 122, 205-210	1.8	29
4 ⁰⁰	Secondary flows due to axial shearing of a third grade fluid between two eccentrically placed cylinders. <i>International Journal of Engineering Science</i> , 1999 , 37, 411-429	5.7	29
399	A BOUNDARY VALUE PROBLEM IN GROUNDWATER MOTION ANALYSIS [COMPARISON OF PREDICTIONS BASED ON DARCY'S LAW AND THE CONTINUUM THEORY OF MIXTURES. <i>Mathematical Models and Methods in Applied Sciences</i> , 1993 , 03, 231-248	3.5	29

- 398 On a variant of the Maxwell and Oldroyd-B models within the context of a thermodynamic basis. *International Journal of Non-Linear Mechanics*, **2015**, 76, 42-47 2.8 28
- 397 Determination of pressure data from velocity data with a view toward its application in cardiovascular mechanics. Part 1. Theoretical considerations. *International Journal of Engineering Science*, **2016**, 105, 108-127 5.7 28
- 396 A mixture theory for heat-induced alterations in hydration and mechanical properties in soft tissues. *International Journal of Engineering Science*, **2001**, 39, 1535-1556 5.7 28
- 395 On Kelvin-Voigt model and its generalizations. *Evolution Equations and Control Theory*, **2012**, 1, 17-42 2 28
- 394 A promising approach for modeling biological fibers. *Acta Mechanica*, **2016**, 227, 1609-1619 2.1 27
- 393 Study of a variant of Stokes' first and second problems for fluids with pressure dependent viscosities. *International Journal of Engineering Science*, **2009**, 47, 1357-1366 5.7 27
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- 391 Nonlinear elasticity with limiting small strain for cracks subject to non-penetration. *Mathematics and Mechanics of Solids*, **2017**, 22, 1334-1346 2.3 26
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- 387 A Thermomechanical Framework for the Transition of a Viscoelastic Liquid to a Viscoelastic Solid. *Mathematics and Mechanics of Solids*, **2004**, 9, 37-59 2.3 26
- 386 The mechanics and mathematics of the effect of pressure on the shear modulus of elastomers. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2009**, 465, 3859-3874 2.4 25
- 385 Pulsatile Flow of a Chemically-Reacting Nonlinear Fluid. *Computers and Mathematics With Applications*, **2006**, 52, 1131-1144 2.7 25
- 384 Nonlinear Reynolds equation for hydrodynamic lubrication. *Applied Mathematical Modelling*, **2015**, 39, 5299-5309 4.5 24
- 383 Unsteady motions of a new class of elastic solids. *Wave Motion*, **2014**, 51, 833-843 1.8 24
- 382 Existence of solutions for the anti-plane stress for a new class of strain-limiting elastic bodies. *Calculus of Variations and Partial Differential Equations*, **2015**, 54, 2115-2147 1.5 24
- 381 Development of three dimensional constitutive theories based on lower dimensional experimental data. *Applications of Mathematics*, **2009**, 54, 147-176 24

380	Incompressible rate type fluids with pressure and shear-rate dependent material moduli. <i>Nonlinear Analysis: Real World Applications</i> , 2007 , 8, 156-164	2.1	24
379	A continuum model for the anisotropic creep of single crystal nickel-based superalloys. <i>Acta Materialia</i> , 2006 , 54, 1487-1500	8.4	24
378	On the effect of dissipation in shape-memory alloys. <i>Nonlinear Analysis: Real World Applications</i> , 2003 , 4, 581-597	2.1	24
377	Lubrication With Binary Mixtures: Liquid-Liquid Emulsion in an EHL Conjunction. <i>Journal of Tribology</i> , 1993 , 115, 515-522	1.8	24
376	Flow of granular materials between rotating disks. <i>Mechanics Research Communications</i> , 1994 , 21, 629-634	2.4	24
375	On an inhomogeneous deformation of a generalized Neo-Hookean material. <i>Journal of Elasticity</i> , 1992 , 28, 165-184	1.5	24
374	Inelastic response of solids described by implicit constitutive relations with nonlinear small strain elastic response. <i>International Journal of Plasticity</i> , 2015 , 71, 1-9	7.6	23
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371	A thermodynamic framework for a mixture of two liquids. <i>Nonlinear Analysis: Real World Applications</i> , 2008 , 9, 1649-1660	2.1	23
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