# Yuri Podladchikov

## List of Publications by Year in Descending Order



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| 163 papers | 6,477 citations | 44 h-index | 72 g-index |
| 232 ext. papers | 7,212 ext. citations | 4 avg, IF | 6.13 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 163 | Thermolab: A Thermodynamics Laboratory for Nonlinear Transport Processes in Open Systems. *Geochemistry, Geophysics, Geosystems*, **2022**, 23, | 3.6 | 1 |
| 162 | An efficient two-layer landslide-tsunami numerical model: effects of momentum transfer validated with physical experiments of waves generated by granular landslides. *Natural Hazards and Earth System Sciences*, **2021**, 21, 1229-1245 | 3.9 | 1 |
| 161 | Achieving complete reaction while the solid volume increases: A numerical model applied to serpentinisation. *Earth and Planetary Science Letters*, **2021**, 563, 116859 | 5.3 | 6 |
| 160 | Resolving Wave Propagation in Anisotropic Poroelastic Media Using Graphical Processing Units (GPUs). *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2020JB021175 | 3.6 | 3 |
| 159 | Stability of discrete schemes of Biot poroelastic equations. *Geophysical Journal International*, **2021**, 225, 354-377 | 2.6 | 4 |
| 158 | An exact solution to the Lame problem for a hollow sphere for new types of nonlinear elastic materials in the case of large deformations. *European Journal of Mechanics, A/Solids*, **2021**, 90, 104345 | 3.7 | 2 |
| 157 | An explicit GPU-based material point method solver for elastoplastic problems (ep2-3De v1.0). *Geoscientific Model Development*, **2021**, 14, 7749-7774 | 6.3 | 0 |
| 156 | Modelling thermomechanical ice deformation using an implicit pseudo-transient method (FastICE v1.0) based on graphical processing units (GPUs). *Geoscientific Model Development*, **2020**, 13, 955-976 | 6.3 | 5 |
| 155 | Instantaneous rock transformations in the deep crust driven by reactive fluid flow. *Nature Geoscience*, **2020**, 13, 307-311 | 18.3 | 27 |
| 154 | Sustainable densification of the deep crust. *Geology*, **2020**, 48, 673-677 | 5 | 12 |
| 153 | A fast and efficient MATLAB-based MPM solver: fMPMM-solver v1.1. *Geoscientific Model Development*, **2020**, 13, 6265-6284 | 6.3 | 2 |
| 152 | Calculating pressure with elastic geobarometry: A comparison of different elastic solutions with application to a calc-silicate gneiss from the Rhodope Metamorphic Province. *Lithos*, **2020**, 378-379, 105803 | 2.9 | 6 |
| 151 | 2D Hydro-Mechanical-Chemical Modeling of (De)hydration Reactions in Deforming Heterogeneous Rock: The Periclase-Brucite Model Reaction. *Geochemistry, Geophysics, Geosystems*, **2020**, 21, e2020GC009351 | 3.6 | 7 |
| 150 | Model for (De)Compaction and Porosity Waves in Porous Rocks Under Shear Stresses. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2020JB019683 | 3.6 | 4 |
| 149 | Detection of rock bridges by infrared thermal imaging and modeling. *Scientific Reports*, **2019**, 9, 13138 | 4.9 | 28 |
| 148 | Spontaneous generation of ductile shear zones by thermal softening: Localization criterion, 1D to 3D modelling and application to the lithosphere. *Earth and Planetary Science Letters*, **2019**, 519, 284-296 | 5.3 | 21 |
| 147 | Relation between mean stress, thermodynamic, and lithostatic pressure. *Journal of Metamorphic Geology*, **2019**, 37, 1-14 | 4.4 | 29 |

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| 146 | Resolving hydromechanical coupling in two and three dimensions: spontaneous channelling of porous fluids owing to decompaction weakening. *Geophysical Journal International*, **2019**, 218, 1591-1616 | 2.6 | 17 |
| 145 | Resolving thermomechanical coupling in two and three dimensions: spontaneous strain localization owing to shear heating. *Geophysical Journal International*, **2019**, 216, 365-379 | 2.6 | 17 |
| 144 | Simulation of three-dimensional viscoelastic deformation coupled to porous fluid flow. *Tectonophysics*, **2018**, 746, 695-701 | 3.1 | 34 |
| 143 | Spontaneous formation of fluid escape pipes from subsurface reservoirs. *Scientific Reports*, **2018**, 8, 11116 | 4.9 | 29 |
| 142 | Reconstructing spatially variable mass balances from past ice extents by inverse modeling. *Journal of Glaciology*, **2018**, 64, 957-968 | 3.4 | 4 |
| 141 | Assessment of CO2 storage capacity based on sparse data: Skade Formation. *International Journal of Greenhouse Gas Control*, **2018**, 79, 252-271 | 4.2 | 16 |
| 140 | Experimental Poroviscoelasticity of Common Sedimentary Rocks. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 7586-7603 | 3.6 | 19 |
| 139 | M2Di: Concise and efficient MATLAB 2-D Stokes solvers using the Finite Difference Method. *Geochemistry, Geophysics, Geosystems*, **2017**, 18, 755-768 | 3.6 | 16 |
| 138 | Fluid escape from subduction zones controlled by channel-forming reactive porosity. *Nature Geoscience*, **2017**, 10, 150-156 | 18.3 | 118 |
| 137 | Ultrafast eclogite formation via melting-induced overpressure. *Earth and Planetary Science Letters*, **2017**, 479, 1-17 | 5.3 | 23 |
| 136 | Quantification of Viscous Creep Influence on Storage Capacity of Caprock. *Energy Procedia*, **2017**, 114, 3237-3246 | 2.3 | 17 |
| 135 | On the Unjacketed Moduli of Sedimentary Rock **2017**, | | 4 |
| 134 | Pore Fluid Extraction by Reactive Solitary Waves in 3-D. *Geophysical Research Letters*, **2017**, 44, 9267-9275 | 4.9 | 40 |
| 133 | On the Mechanisms of Stress-Triggered Seismic Events during Fluid Injection **2017**, | | 26 |
| 132 | An analytical solution for solitary porosity waves: dynamic permeability and fluidization of nonlinear viscous and viscoplastic rock **2016**, 285-306 | | 1 |
| 131 | Thermodynamic equilibrium at heterogeneous pressure. *Contributions To Mineralogy and Petrology*, **2015**, 170, 1 | 3.5 | 15 |
| 130 | Shear heating-induced strain localization across the scales. *Philosophical Magazine*, **2015**, 95, 3192-3207 | 1.6 | 19 |
| 129 | Bubbles attenuate elastic waves at seismic frequencies: First experimental evidence. *Geophysical Research Letters*, **2015**, 42, 3880-3887 | 4.9 | 43 |

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| 128 | (De)compaction of porous viscoelastoplastic media: Model formulation. *Journal of Geophysical Research: Solid Earth*, **2015**, 120, 4146-4170 | 3.6 | 75 |
| 127 | Coupling changes in densities and porosity to fluid pressure variations in reactive porous fluid flow: Local thermodynamic equilibrium. *Geochemistry, Geophysics, Geosystems*, **2015**, 16, 4362-4387 | 3.6 | 22 |
| 126 | (De)compaction of porous viscoelastoplastic media: Solitary porosity waves. *Journal of Geophysical Research: Solid Earth*, **2015**, 120, 4843-4862 | 3.6 | 28 |
| 125 | Viscous relaxation of grain-scale pressure variations. *Journal of Metamorphic Geology*, **2015**, 33, 859-868 | 4.4 | 24 |
| 124 | Mechanically- v. diffusion-controlled metamorphic microstructure: a symplectite example from Rhodope Metamorphic Complex (Greece). *Journal of Metamorphic Geology*, **2015**, 33, 849-858 | 4.4 | 7 |
| 123 | Current challenges for explaining (ultra)high-pressure tectonism in the Pennine domain of the Central and Western Alps. *Journal of Metamorphic Geology*, **2015**, 33, 869-886 | 4.4 | 23 |
| 122 | An analytical solution for solitary porosity waves: dynamic permeability and fluidization of nonlinear viscous and viscoplastic rock. *Geofluids*, **2015**, 15, 269-292 | 1.5 | 40 |
| 121 | Shear-induced Dilation and its Implications for Chimney Flow in Porous Rocks **2015**, | | 3 |
| 120 | Saint-Venant Equations and Friction Law for Modelling Self-Channeling Granular Flows: From Analogue to Numerical Simulation. *Applied Mathematics*, **2015**, 06, 1161-1173 | 0.4 | 1 |
| 119 | Grain-scale pressure variations and chemical equilibrium in high-grade metamorphic rocks. *Journal of Metamorphic Geology*, **2014**, 32, 195-207 | 4.4 | 59 |
| 118 | A purely structural restoration of the NFP20-East cross section and potential tectonic overpressure in the Adula nappe (central Alps). *Tectonics*, **2014**, 33, 656-685 | 4.3 | 33 |
| 117 | Metamorphism under stress: The problem of relating minerals to depth. *Geology*, **2014**, 42, 733-734 | 5 | 31 |
| 116 | Effects of lithosphere buckling on subsidence and hydrocarbon maturation: A case-study from the ultra-deep East Barents Sea basin. *Earth and Planetary Science Letters*, **2014**, 407, 123-133 | 5.3 | 11 |
| 115 | Physics-controlled thickness of shear zones caused by viscous heating: Implications for crustal shear localization. *Geophysical Research Letters*, **2014**, 41, 4904-4911 | 4.9 | 34 |
| 114 | Stress field associated with elliptical inclusions in a deforming matrix: Mathematical model and implications for tectonic overpressure in the lithosphere. *Tectonophysics*, **2014**, 631, 37-49 | 3.1 | 51 |
| 113 | Kinematics and dynamics of tectonic nappes: 2-D numerical modelling and implications for high and ultra-high pressure tectonism in the Western Alps. *Tectonophysics*, **2014**, 631, 160-175 | 3.1 | 39 |
| 112 | Chimneys, channels, pathway flow or water conducting features - an explanation from numerical modelling and implications for CO2 storage. *Energy Procedia*, **2014**, 63, 3761-3774 | 2.3 | 43 |
| 111 | Relationship between tectonic overpressure, deviatoric stress, driving force, isostasy and gravitational potential energy. *Geophysical Journal International*, **2014**, 197, 680-696 | 2.6 | 61 |

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| 110 | Seismic wave attenuation in fluid-saturated rock as result of gas dissolution **2014**, | | 2 |
| 109 | Rifting assisted by shear heating and formation of the Lomonosov Ridge. *Earth and Planetary Science Letters*, **2013**, 373, 31-40 | 5.3 | 15 |
| 108 | The problem of depth in geology: When pressure does not translate into depth. *Petrology*, **2013**, 21, 527-538 | 1.2 | 52 |
| 107 | Episodic Slip and Waves of Fluid-Filled Porosity **2013**, | | 4 |
| 106 | A Hydromechanical Model for Lower Crustal Fluid Flow. *Lecture Notes in Earth System Sciences*, **2013**, 599-658 | 0.4 | 26 |
| 105 | Formation of intracratonic basins by lithospheric shortening and phase changes: a case study from the ultra-deep East Barents Sea basin. *Terra Nova*, **2013**, 25, 459-464 | 3 | 17 |
| 104 | Tectonic overpressure in weak crustal-scale shear zones and implications for the exhumation of high-pressure rocks. *Geophysical Research Letters*, **2013**, 40, 1984-1988 | 4.9 | 93 |
| 103 | A two-phase composite in simple shear: Effective mechanical anisotropy development and localization potential. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a | | 29 |
| 102 | Devolatilization-induced pressure build-up: Implications for reaction front movement and breccia pipe formation. *Geofluids*, **2012**, 12, 265-279 | 1.5 | 40 |
| 101 | Volcanic arcs fed by rapid pulsed fluid flow through subducting slabs. *Nature Geoscience*, **2012**, 5, 489-492 | 8.3 | 200 |
| 100 | On the origin of the ultradeep East Barents Sea basin. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a | | 18 |
| 99 | Tectonic subsidence of the Lomonosov Ridge. *Geology*, **2012**, 40, 99-102 | 5 | 13 |
| 98 | Impact of fluid saturation on the reflection coefficient of a poroelastic layer. *Geophysics*, **2011**, 76, N1-N12 | 3.1 | 35 |
| 97 | Viscoelastic mantle convection and lithospheric stresses. *Geophysical Journal International*, **2010**, 183, 35-63 | 2.6 | 28 |
| 96 | An alternative model for ultra-high pressure in the Svartberget Fe-Ti garnet-peridotite, Western Gneiss Region, Norway. *European Journal of Mineralogy*, **2010**, 21, 1119-1133 | 2.2 | 54 |
| 95 | Sandstone dikes in dolerite sills: Evidence for high-pressure gradients and sediment mobilization during solidification of magmatic sheet intrusions in sedimentary basins **2010**, 6, 211-224 | | 10 |
| 94 | Modeling of craton stability using a viscoelastic rheology. *Journal of Geophysical Research*, **2010**, 115, | | 14 |
| 93 | An analytical benchmark with combined pressure and shear loading for elastoplastic numerical models. *Geochemistry, Geophysics, Geosystems*, **2010**, 11, n/a-n/a | 3.6 | 17 |

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| 92 | Experimental and analytic modeling of piercement structures. *Journal of Geophysical Research*, **2010**, 115, | | 33 |
| 91 | How contact metamorphism can trigger global climate changes: Modeling gas generation around igneous sills in sedimentary basins. *Geochimica Et Cosmochimica Acta*, **2010**, 74, 7179-7195 | 5.5 | 150 |
| 90 | Plastic yielding as a frequency and amplitude independent mechanism of seismic wave attenuation. *Geophysics*, **2010**, 75, N51-N63 | 3.1 | 15 |
| 89 | Density variations in the thickened crust as a function of pressure, temperature, and composition. *International Journal of Earth Sciences*, **2010**, 99, 1487-1510 | 2.2 | 27 |
| 88 | Spontaneous dissipation of elastic energy by self-localizing thermal runaway. *Physical Review E*, **2009**, 80, 046105 | 2.4 | 10 |
| 87 | Assimilation and diffusion during xenolith-magma interaction: a case study of the Variscan Karkonosze Granite, Bohemian Massif. *Mineralogy and Petrology*, **2009**, 97, 203-222 | 1.6 | 7 |
| 86 | Spectral modification of seismic waves propagating through solids exhibiting a resonance frequency: a 1-D coupled wave propagation-oscillation model. *Geophysical Journal International*, **2009**, 176, 589-600 | 2.6 | 33 |
| 85 | Generation of intermediate-depth earthquakes by self-localizing thermal runaway. *Nature Geoscience*, **2009**, 2, 137-140 | 18.3 | 152 |
| 84 | Matrix rheology effects on reaction rim growth II: coupled diffusion and creep model. *Journal of Metamorphic Geology*, **2009**, 27, 83-91 | 4.4 | 25 |
| 83 | A thin elastic core can control large-scale patterns of lithosphere shortening. *Earth and Planetary Science Letters*, **2009**, 277, 80-85 | 5.3 | 13 |
| 82 | Siberian gas venting and the end-Permian environmental crisis. *Earth and Planetary Science Letters*, **2009**, 277, 490-500 | 5.3 | 459 |
| 81 | Transformation-induced jointing as a gauge for interfacial slip and rock strength. *Earth and Planetary Science Letters*, **2009**, 280, 159-166 | 5.3 | 16 |
| 80 | Strike-slip faulting as a trigger mechanism for overpressure release through piercement structures. Implications for the Lusi mud volcano, Indonesia. *Marine and Petroleum Geology*, **2009**, 26, 1751-1765 | 4.7 | 114 |
| 79 | Dynamics of hydrothermal seeps from the Salton Sea geothermal system (California, USA) constrained by temperature monitoring and time series analysis. *Journal of Geophysical Research*, **2009**, 114, | | 19 |
| 78 | Low-frequency reflections from a thin layer with high attenuation caused by interlayer flow. *Geophysics*, **2009**, 74, N15-N23 | 3.1 | 57 |
| 77 | Fractional Steps methods for transient problems on commodity computer architectures. *Physics of the Earth and Planetary Interiors*, **2008**, 171, 122-136 | 2.3 | 25 |
| 76 | The effect of mantle composition on density in the extending lithosphere. *Earth and Planetary Science Letters*, **2008**, 272, 148-157 | 5.3 | 43 |
| 75 | Post-emplacement melt flow induced by thermal stresses: Implications for differentiation in sills. *Earth and Planetary Science Letters*, **2008**, 276, 152-166 | 5.3 | 24 |

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| 74 | Vertical motions of the fjord regions of central East Greenland: Impact of glacial erosion, deposition, and isostasy. *Geology*, **2008**, 36, 539 | 5 | 38 |
| 73 | Stress release in exhumed intermediate and deep earthquakes determined from ultramafic pseudotachylyte. *Geology*, **2008**, 36, 995 | 5 | 65 |
| 72 | Toasting the jelly sandwich: The effect of shear heating on lithospheric geotherms and strength. *Geology*, **2008**, 36, 331 | 5 | 35 |
| 71 | Automated thermotectonostratigraphic basin reconstruction: Viking Graben case study. *AAPG Bulletin*, **2008**, 92, 309-326 | 2.5 | 29 |
| 70 | Decompaction weakening and channeling instability in ductile porous media: Implications for asthenospheric melt segregation. *Journal of Geophysical Research*, **2007**, 112, | | 89 |
| 69 | Magnetic field visualization of magnetic minerals and grain boundary regions using magneto-optical imaging. *Journal of Geophysical Research*, **2007**, 112, | | 2 |
| 68 | Failure patterns caused by localized rise in pore-fluid overpressure and effective strength of rocks. *Geophysical Research Letters*, **2007**, 34, | 4.9 | 92 |
| 67 | The effect of nonhydrostaticity on elastoplastic compaction and decompaction. *Izvestiya, Physics of the Solid Earth*, **2007**, 43, 67-74 | 1 | 5 |
| 66 | Spontaneous thermal runaway as an ultimate failure mechanism of materials. *Physical Review Letters*, **2007**, 98, 095504 | 7.4 | 78 |
| 65 | Seismic low-frequency anomalies in multiple reflections from thinly layered poroelastic reservoirs **2007**, | | 9 |
| 64 | Low-frequency anomalies in spectral ratios of single-station microtremor measurements: Observations across an oil and gas field in Austria **2007**, | | 7 |
| 63 | Interaction of seismic background noise with oscillating pore fluids causes spectral modifications of passive seismic measurements at low frequencies **2007**, | | 3 |
| 62 | Fold amplification rates and dominant wavelength selection in multilayer stacks. *Philosophical Magazine*, **2006**, 86, 3409-3423 | 1.6 | 38 |
| 61 | Initiation of localized shear zones in viscoelastoplastic rocks. *Journal of Geophysical Research*, **2006**, 111, | | 123 |
| 60 | Growth and characterization of complex mineral surfaces. *Earth and Planetary Science Letters*, **2006**, 249, 108-118 | 5.3 | 13 |
| 59 | Interpretation of hydrocarbon microtremors as nonlinear oscillations driven by oceanic background waves **2006**, | | 3 |
| 58 | Interpretation of Hydrocarbon Microtremors as Pore Fluid Oscillations Driven by Ambient Seismic Noise **2006**, | | 3 |
| 57 | Controls on the Deformation of the Central and Southern Andes (10–35°S): Insight from Thin-Sheet Numerical Modeling **2006**, 475-494 | | 4 |

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| 56 | Effect of mineral phase transitions on sedimentary basin subsidence and uplift. *Earth and Planetary Science Letters*, **2005**, 233, 213-228 | 5.3 | 67 |
| 55 | Structural softening of the lithosphere. *Terra Nova*, **2005**, 17, 66-72 | 3 | 31 |
| 54 | Mantled porphyroclast gauges. *Journal of Structural Geology*, **2005**, 27, 571-585 | 3 | 31 |
| 53 | Dome structures in collision orogens: Mechanical investigation of the gravity/compression interplay **2004**, | | 23 |
| 52 | Folding of a finite length power law layer. *Journal of Geophysical Research*, **2004**, 109, | | 14 |
| 51 | Fluid flow in compressive tectonic settings: Implications for midcrustal seismic reflectors and downward fluid migration. *Journal of Geophysical Research*, **2004**, 109, | | 66 |
| 50 | Are isolated stable rigid clasts in shear zones equivalent to voids?. *Tectonophysics*, **2004**, 384, 233-242 | 3.1 | 45 |
| 49 | Hydrothermal vent complexes associated with sill intrusions in sedimentary basins. *Geological Society Special Publication*, **2004**, 234, 233-241 | 1.7 | 86 |
| 48 | Analytical solutions for deformable elliptical inclusions in general shear. *Geophysical Journal International*, **2003**, 155, 269-288 | 2.6 | 125 |
| 47 | A coupled petrological-tectonic model for sedimentary basin evolution: the influence of metamorphic reactions on basin subsidence. *Terra Nova*, **2002**, 13, 354-359 | 3 | 45 |
| 46 | Universal scaling in transient creep. *Physical Review Letters*, **2002**, 89, 246102 | 7.4 | 44 |
| 45 | Control of folding by gravity and matrix thickness: Implications for large-scale folding. *Journal of Geophysical Research*, **2002**, 107, ETG 1-1-ETG 1-16 | | 64 |
| 44 | Inverse Modelling of Sedimentary Basins. *Mathematics in Industry*, **2002**, 625-629 | 0.2 | 1 |
| 43 | Modelling of viscoelastic plume-lithosphere interaction using the adaptive multilevel wavelet collocation method. *Geophysical Journal International*, **2001**, 147, 579-589 | 2.6 | 14 |
| 42 | A spectral/finite difference method for simulating large deformations of heterogeneous, viscoelastic materials. *Geophysical Journal International*, **2001**, 145, 199-208 | 2.6 | 64 |
| 41 | Two-dimensional inverse modeling of sedimentary basin subsidence. *Journal of Geophysical Research*, **2001**, 106, 6657-6671 | | 23 |
| 40 | Forward and reverse modeling of the three-dimensional viscous Rayleigh-Taylor instability. *Geophysical Research Letters*, **2001**, 28, 1095-1098 | 4.9 | 49 |
| 39 | Viscoelastic folding: Maxwell versus Kelvin Rheology. *Geophysical Research Letters*, **2001**, 28, 1835-1838 | 4.9 | 16 |

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| 38 | Dynamic modeling of the transition from passive to active rifting, application to the Pannonian Basin. *Tectonics*, **2001**, 20, 1021-1039 | 4.3 | 83 |
| 37 | Transition from passive to active rifting: Relative importance of asthenospheric doming and passive extension of the lithosphere. *Journal of Geophysical Research*, **2001**, 106, 11271-11291 | | 131 |
| 36 | Strain and competence contrast estimation from fold shape. *Tectonophysics*, **2001**, 340, 195-213 | 3.1 | 56 |
| 35 | Lithospheric pressure–depth relationship in compressive regions of thickened crust. *Journal of Metamorphic Geology*, **2000**, 18, 67-77 | 4.4 | 140 |
| 34 | From buckling to asymmetric folding of the continental lithosphere: numerical modelling and application to the Himalayan syntaxes. *Geological Society Special Publication*, **2000**, 170, 219-236 | 1.7 | 20 |
| 33 | Finite amplitude folding: transition from exponential to layer length controlled growth. *Earth and Planetary Science Letters*, **2000**, 179, 363-377 | 5.3 | 29 |
| 32 | Dynamic link between the level of ductile crustal flow and style of normal faulting of brittle crust. *Tectonophysics*, **2000**, 320, 195-218 | 3.1 | 40 |
| 31 | Temperature-dependent viscoelastic compaction and compartmentalization in sedimentary basins. *Tectonophysics*, **2000**, 324, 137-168 | 3.1 | 102 |
| 30 | New extended thin-sheet approximation for geodynamic applications--I. Model formulation. *Geophysical Journal International*, **1999**, 136, 567-585 | 2.6 | 35 |
| 29 | New extended thin-sheet approximation for geodynamic applications--II. Two-dimensional examples. *Geophysical Journal International*, **1999**, 136, 586-608 | 2.6 | 25 |
| 28 | Lithospheric scale folding: numerical modelling and application to the Himalayan syntaxes. *International Journal of Earth Sciences*, **1999**, 88, 190-200 | 2.2 | 84 |
| 27 | Visualization and Analysis of Mixing Dynamical Properties in Convecting Systems with Different Rheologies. *Visual Geosciences*, **1999**, 4, 1-15 | | 2 |
| 26 | Buckling versus folding: Importance of viscoelasticity. *Geophysical Research Letters*, **1999**, 26, 2641-2644 | 4.9 | 84 |
| 25 | The effect of inplane force variations on a faulted elastic thin-plate, Implications for rifted sedimentary basins. *Geophysical Research Letters*, **1998**, 25, 3903-3906 | 4.9 | 9 |
| 24 | A new multilayered model for intraplate stress-induced differential subsidence of faulted lithosphere, applied to rifted basins. *Tectonics*, **1998**, 17, 938-954 | 4.3 | 37 |
| 23 | Comparison of mixing properties in convection with the Particle-Line Method. *Geophysical Research Letters*, **1998**, 25, 3205-3208 | 4.9 | 16 |
| 22 | Modeling of compaction driven flow in poro-viscoelastic medium using adaptive wavelet collocation method. *Geophysical Research Letters*, **1998**, 25, 3239-3242 | 4.9 | 57 |
| 21 | Numerical modelling of growth strata and grain-size distributions associated with fault-bend folding. *Geological Society Special Publication*, **1998**, 134, 381-401 | 1.7 | 3 |

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| 20 | Compaction-driven fluid flow in viscoelastic rock. *Geodinamica Acta*, **1998**, 11, 55-84 | 2 | 185 |
| 19 | Applicability of wavelet algorithm for geophysical viscoelastic flow. *Geophysical Research Letters*, **1997**, 24, 3097-3100 | 4.9 | 10 |
| 18 | Fractal features in mixing of non-Newtonian and Newtonian mantle convection. *Earth and Planetary Science Letters*, **1997**, 146, 401-414 | 5.3 | 26 |
| 17 | Spacing of consecutive normal faulting in the lithosphere: A dynamic model for rift axis jumping (Tyrrhenian Sea). *Earth and Planetary Science Letters*, **1996**, 144, 21-34 | 5.3 | 27 |
| 16 | Sedimentary cycles and paleogeography of the Dnieper Donets Basin during the late Visean-Serpukhovian based on multiscale analysis of well logs. *Tectonophysics*, **1996**, 268, 169-187 | 3.1 | 21 |
| 15 | Salt diapirism with simultaneous brittle faulting and viscous flow. *Geological Society Special Publication*, **1996**, 100, 291-302 | 1.7 | 28 |
| 14 | The rise of solid-state diapirs. *Journal of Structural Geology*, **1995**, 17, 1183-1195 | 3 | 63 |
| 13 | The effect of lithospheric phase transitions on subsidence of extending continental lithosphere. *Earth and Planetary Science Letters*, **1994**, 124, 95-103 | 5.3 | 33 |
| 12 | Diapiric ascent of magmas through power law crust and mantle. *Journal of Geophysical Research*, **1994**, 99, 9543-9559 | | 162 |
| 11 | Crystallization of Hydrous Magmas: Calculation of Associated Thermal Effects, Volatile Fluxes, and Isotopic Alteration. *Journal of Geology*, **1994**, 102, 25-45 | 2 | 19 |
| 10 | Crustal anatexis during the influx of mantle volatiles. *Lithos*, **1993**, 30, 93-107 | 2.9 | 24 |
| 9 | A rheological model of a fractured solid. *Tectonophysics*, **1993**, 226, 187-198 | 3.1 | 39 |
| 8 | Numerical analysis of how sedimentation and redistribution of surficial sediments affects salt diapirism. *Tectonophysics*, **1993**, 226, 199-216 | 3.1 | 44 |
| 7 | Numerical models of complex diapirs. *Tectonophysics*, **1993**, 228, 189-198 | 3.1 | 46 |
| 6 | Initiation of salt diapirs with frictional overburdens: numerical experiments. *Tectonophysics*, **1993**, 228, 199-210 | 3.1 | 96 |
| 5 | An Explicit Inertial Method for the Simulation of Viscoelastic Flow: An Evaluation of Elastic Effects on Diapiric Flow in Two- and Three- Layers Models **1993**, 175-195 | | 59 |
| 4 | Hydrodynamic modelling of some metamorphic processes. *Journal of Metamorphic Geology*, **1992**, 10, 311-319 | 4.4 | 24 |
| 3 | Diapirism and topography. *Geophysical Journal International*, **1992**, 109, 553-564 | 2.6 | 71 |

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| 2 | THE MECHANISM OF TRANSPORT AND ERUPTION OF COGNATE INCLUSIONS IN VOLCANIC ROCKS. *International Geology Review*, **1991**, 33, 879-888 | 2.3 | |
| 1 | Physics-inspired pseudo-transient method and its application in modelling focused fluid flow with geological complexity. *Geophysical Journal International*, | 2.6 | 1 |