D Yu Borin

List of Publications by Year
in descending order

90	1,872	257450 24	302126 39
papers	citations	h-index	g-index

93	93	93	939
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Motion of ferroparticles inside the polymeric matrix in magnetoactive elastomers. Journal of Physics Condensed Matter, 2008, 20, 204121.	1.8	139
2	XÎ¼CT analysis of magnetic field-induced phase transitions in magnetorheological elastomers. Smart Materials and Structures, 2012, 21, 105018.	3.5	102
3	X-ray micro-tomographic characterization of field-structured magnetorheological elastomers. Smart Materials and Structures, 2012, 21, 015005.	3.5	102
4	Rheological characterisation and prediction of pumpability of strain-hardening cement-based-composites (SHCC) with and without addition of superabsorbent polymers (SAP) at various temperatures. Construction and Building Materials, 2016, 112, 581-594.	7.2	70
5	The level of cross-linking and the structure of anisotropic magnetorheological elastomers. Journal of Magnetism and Magnetic Materials, 2012, 324, 3452-3454.	2.3	65
6	A characterisation of the magnetically induced movement of NdFeB-particles in magnetorheological elastomers. Smart Materials and Structures, 2017, 26, 095018.	3.5	59
7	Modeling of magnetic hystereses in soft MREs filled with NdFeB particles. Smart Materials and Structures, 2017, 26, 105019.	3.5	56
8	Structural control of elastic moduli in ferrogels and the importance of non-affine deformations. Journal of Chemical Physics, 2014, 141, 124904.	3.0	53
9	First-order reversal curve analysis of magnetoactive elastomers. RSC Advances, 2016, 6, 100407-100416.	3.6	51
10	Tuning the tensile modulus of magnetorheological elastomers with magnetically hard powder. Journal of Physics: Conference Series, 2013, 412, 012040.	0.4	50
11	Dynamic response of a sensor element made of magnetic hybrid elastomer with controllable properties. Journal of Magnetism and Magnetic Materials, 2018, 449, 77-82.	2.3	49
12	Motion behaviour of magneto-sensitive elastomers controlled by an external magnetic field for sensor applications. Journal of Magnetism and Magnetic Materials, 2017, 431, 262-265.	2.3	45
13	Hysteresis of the magnetic properties of soft magnetic gels. Soft Matter, 2016, 12, 6473-6480.	2.7	44
14	Magnetoactive elastomer based on magnetically hard filler: Synthesis and study of viscoelastic and damping properties. Polymer Science - Series A, 2014, 56, 603-613.	1.0	43
15	Hybrid magnetoactive elastomer with a soft matrix and mixed powder. Archive of Applied Mechanics, 2019, 89, 105-117.	2.2	43
16	Magnetic properties of hybrid elastomers with magnetically hard fillers: rotation of particles. Smart Materials and Structures, 2017, 26, 035060.	3.5	42
17	Tunable dynamic response of magnetic gels: Impact of structural properties and magnetic fields. Physical Review E, 2014, 90, 042311.	2.1	41
18	Ferrofluid with clustered iron nanoparticles: Slow relaxation of rheological properties under joint action of shear flow and magnetic field. Journal of Magnetism and Magnetic Materials, 2011, 323, 1273-1277.	2.3	39

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19	Application of X-ray radioscopic methods for characterization of two-phase phenomena and solidification processes in metallic melts. European Physical Journal: Special Topics, 2013, 220, 63-77.	2.6	37
20	Effect of particle concentration on ferrogel magnetodeformation. Journal of Magnetism and Magnetic Materials, 2015, 377, 373-377.	2.3	36
21	Rheology of a ferrofluid based on nanodisc cobalt particles. Journal Physics D: Applied Physics, 2009, 42, 205004.	2.8	30
22	Mechanical Properties of Magnetoâ€Sensitive Elastomers in a Homogeneous Magnetic Field: Theory and Experiment. Macromolecular Symposia, 2014, 338, 96-107.	0.7	29
23	Magnetorheological effect of magneto-active elastomers containing large particles. Journal of Physics: Conference Series, 2009, 149, 012098.	0.4	25
24	Magnetoviscous effect in ferrofluids with different dispersion media. Journal of Magnetism and Magnetic Materials, 2016, 416, 110-116.	2.3	25
25	On the oscillating shear rheometry of magnetorheological elastomers. Rheologica Acta, 2018, 57, 217-227.	2.4	24
26	Rotation of magnetic particles inside the polymer matrix of magnetoactive elastomers with a hard magnetic filler. Journal of Magnetism and Magnetic Materials, 2017, 431, 138-140.	2.3	23
27	Targeted patterning of magnetic microparticles in a polymer composite. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190256.	3.4	22
28	Magnetic measurements on frozen ferrofluids as a method for estimating the magnetoviscous effect. Journal of Physics Condensed Matter, 2009, 21, 246002.	1.8	21
29	Stress induced by the striction of hybrid magnetoactive elastic composites. Journal of Magnetism and Magnetic Materials, 2019, 470, 85-88.	2.3	21
30	Basic magnetic properties of magnetoactive elastomers of mixed content. Smart Materials and Structures, 2020, 29, 075034.	3.5	20
31	Scale-dependent particle diffusivity and apparent viscosity in polymer solutions as probed by dynamic magnetic nanorheology. Soft Matter, 2020, 16, 7562-7575.	2.7	18
32	Hindrance of thermomagnetic convection by the magnetoviscous effect. International Journal of Heat and Mass Transfer, 2013, 60, 499-504.	4.8	17
33	A comparison between micro- and macro-structure of magnetoactive composites. Journal of Physics: Conference Series, 2013, 412, 012027.	0.4	17
34	Effect of local elasticity of the matrix on magnetization loops of hybrid magnetic elastomers. Journal of Magnetism and Magnetic Materials, 2018, 459, 92-97.	2.3	17
35	Modeling the magnetomechanical behavior of a multigrain magnetic particle in an elastic environment. Soft Matter, 2019, 15, 4947-4960.	2.7	16
36	Training effect in magnetoactive elastomers due to undermagnetization of magnetically hard filler. Physica B: Condensed Matter, 2020, 578, 411866.	2.7	16

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37	Anisotropy of the magnetoviscous effect in ferrofluids containing nanoparticles exhibiting magnetic dipole interaction. Journal of Physics Condensed Matter, 2011, 23, 346002.	1.8	15
38	Stress relaxation in a ferrofluid with clustered nanoparticles. Journal of Physics Condensed Matter, 2014, 26, 406002.	1.8	15
39	Elastomer with magneto- and electrorheological properties. Journal of Intelligent Material Systems and Structures, 2015, 26, 1893-1898.	2.5	15
40	On anisotropic mechanical properties of heterogeneous magnetic polymeric composites. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180212.	3.4	15
41	Magnetorheological Effect of Magnetoactive Elastomer with a Permalloy Filler. Polymers, 2020, 12, 2371.	4.5	15
42	Reversible and non-reversible motion of NdFeB-particles in magnetorheological elastomers. Journal of Intelligent Material Systems and Structures, 2021, 32, 3-15.	2.5	15
43	Thermomagnetic convection influenced by the magnetoviscous effect. Journal of Physics: Conference Series, 2009, 149, 012105.	0.4	14
44	Advancing Towards Polyurethaneâ€Based Magnetorheological Composites. Advanced Engineering Materials, 2014, 16, 1270-1275.	3.5	14
45	Shear Elasticity of Magnetic Gels with Internal Structures. Sensors, 2018, 18, 2054.	3.8	14
46	Non-ergodic tube structures in magnetic gels and suspensions. Soft Matter, 2018, 14, 8537-8544.	2.7	13
47	Hysteresis of ferrogels magnetostriction. Journal of Magnetism and Magnetic Materials, 2017, 431, 120-122.	2.3	12
48	RHEOLOGY OF NOVEL FERROFLUIDS. International Journal of Modern Physics B, 2011, 25, 963-969.	2.0	10
49	Shear elasticity of isotropic magnetic gels. Physical Review E, 2017, 96, 022605.	2.1	10
50	Negative coercivity of magnetic elastomers filled with magnetically hard particles. Journal of Magnetism and Magnetic Materials, 2020, 498, 166125.	2.3	10
51	Viscosity of liquid metal suspensions â€" experimental approaches and open issues. European Physical Journal: Special Topics, 2013, 220, 101-110.	2.6	9
52	Magnetoviscous effect in ferrofluids diluted with sheep blood. Journal of Magnetism and Magnetic Materials, 2017, 442, 383-390.	2.3	9
53	Characterization of a magnetic fluid exposed to a shear flow and external magnetic field using small angle laser scattering. Journal of Magnetism and Magnetic Materials, 2020, 497, 165959.	2.3	9
54	Influence of the size of magnetic filler particles on the properties of hybrid magnetic elastomer with magnetically hard filler. Journal of Magnetism and Magnetic Materials, 2020, 498, 166071.	2.3	9

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55	Usage of magneto-active elastomers in a bumper of a vehicle for front impact protection. Journal of Physics: Conference Series, 2009, 149, 012089.	0.4	8
56	Magnetic field angle dependent hysteresis of a magnetorheological suspension. Journal of Magnetism and Magnetic Materials, 2017, 443, 275-280.	2.3	8
57	On the theory of hysteretic magnetostriction of soft ferrogels. Physica A: Statistical Mechanics and Its Applications, 2018, 498, 86-95.	2.6	8
58	Mesomagnetomechanics of hybrid elastomer composites: Magnetization of elastically trapped particles. Journal of Magnetism and Magnetic Materials, 2020, 499, 166249.	2.3	8
59	Transient response of magnetorheological fluid on rapid change of magnetic field in shear mode. Scientific Reports, 2022, 12, .	3.3	8
60	Magnetoviscosity of a Magnetic Fluid Based on Barium Hexaferrite Nanoplates. Materials, 2021, 14, 1870.	2.9	7
61	Ring-like structures in magnetoactive elastomers based on magnetic hard powder. Smart Materials and Structures, 2021, 30, 015023.	3.5	7
62	Hybrid magnetic elastomers prepared on the basis of a SIEL-grade resin and their magnetic and rheological properties. ChemistrySelect, 2020, .	1.5	7
63	Magneto-elastic coupling as a key to microstructural response of magnetic elastomers with flake-like particles. Soft Matter, 2022, 18, 496-506.	2.7	7
64	Mobility investigations of magnetic nanoparticles in biocomposites. Materials Chemistry and Physics, 2017, 193, 364-370.	4.0	6
65	The damping device based on magnetoactive elastomer. Magnetohydrodynamics, 2007, 43, 437-444.	0.3	6
66	Magnetoresistive and magnetocapacitive effects in magnetic elastomers. SN Applied Sciences, 2022, 4, .	2.9	6
67	Initial magnetic susceptibility of the diluted magnetopolymer elastic composites. Journal of Magnetism and Magnetic Materials, 2017, 431, 115-119.	2.3	5
68	Internal structures and elastic properties of dense magnetic fluids. Journal of Magnetism and Magnetic Materials, 2020, 498, 166129.	2.3	5
69	Magnetic Response of Magnetoactive Elastomers with Allowance for Slippage at the Particleâ€Matrix Interfaces. Advanced Theory and Simulations, 2021, 4, 2000327.	2.8	5
70	Magneto-mechanical properties of elastic hybrid composites. ChemistrySelect, 2022, 7, 1119-1140.	1.5	5
71	On the shear test of a MR elastomer under magnetic field applied at various angles. Smart Materials and Structures, 2022, 31, 025016.	3.5	5
72	Relaxation dynamics of the rheological properties of ferrofluids. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 519-520.	0.2	4

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73	Magnetic Properties of Frozen Magneto-Active Elastomers. Solid State Phenomena, 0, 152-153, 190-193.	0.3	4
74	Synergistic effect in magnetoelectrorheological fluids with a complex dispersed phase. Journal of Intelligent Material Systems and Structures, 2012, 23, 963-967.	2.5	3
75	Surface influence on the stationary shear deformation of a magnetorheological fluid. European Physical Journal: Special Topics, 0, , 1.	2.6	3
76	Positioning magnetorheological actuator. Journal of Physics: Conference Series, 2009, 149, 012075.	0.4	2
77	Bio-nano composite for remote melting. , 2015, , .		2
78	To the theory of elastic properties of isotropic magnetic gels. Effect of interparticle interaction. Smart Materials and Structures, 2017, 26, 095028.	3.5	2
79	Elastic stress in ferrogels with chain aggregates. Journal of Magnetism and Magnetic Materials, 2020, 498, 166126.	2.3	2
80	Internal structures and elastic properties of concentrated magnetorheological fluids. European Physical Journal: Special Topics, 2020, 229, 2967-2979.	2.6	2
81	Detection of the surface deformation of magneto-active composites using X-ray Î¼-tomography. Magnetohydrodynamics, 2013, 49, 494-498.	0.3	2
82	FORC analysis of magnetically soft microparticles embedded in a polymeric elastic environment. Journal Physics D: Applied Physics, 2022, 55, 155001.	2.8	2
83	Magnetorheological effect in dense magnetic polymers. European Physical Journal: Special Topics, 0, , 1.	2.6	1
84	Magnetization of magnetoactive elastomers under the assumption of breakable adhesion at the particle/matrix interface. Soft Matter, 2022, 18, 4667-4678.	2.7	1
85	Influence of magnetic field on the rheological properties of liquid GaInSn alloy. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10943-10944.	0.2	0
86	Electrorheological fluids and magnetorheological suspensions. Journal of Physics Condensed Matter, 2010, 22, 320301.	1.8	0
87	SYNERGISTIC EFFECT IN MAGNETOELECTRORHEOLOGICAL FLUIDS WITH A COMPLEX DISPERSED PHASE. , 2011, , .		0
88	RHEOLOGY OF NOVEL FERROFLUIDS. , 2011, , .		0
89	Elastic properties of ferrogels with chain-like structures. Physica A: Statistical Mechanics and Its Applications, 2020, 545, 123723.	2.6	0
90	Investigation magnetorheological elastomer elastic deformations under the influence of vibration and electromagnetic load. MATEC Web of Conferences, 2020, 329, 03037.	0.2	0