Konrad Samwer

List of Publications by Year
in descending order

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88	9,679	101535	49904
papers	citations	36 h-index	87 g-index

89	89	89	6071
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Giant negative magnetoresistance in perovskitelikeLa2/3Ba1/3MnOxferromagnetic films. Physical Review Letters, 1993, 71, 2331-2333.	7.8	3,863
2	A Universal Criterion for Plastic Yielding of Metallic Glasses with a(T/Tg)2/3Temperature Dependence. Physical Review Letters, 2005, 95, 195501.	7.8	1,040
3	Local elastic properties of a metallic glass. Nature Materials, 2011, 10, 439-442.	27.5	366
4	The Î² relaxation in metallic glasses: an overview. Materials Today, 2013, 16, 183-191.	14.2	303
5	Glass transition on long time scales. Physical Review B, 1992, 46, 11318-11322.	3.2	257
6	Anelastic to Plastic Transition in Metallic Glass-Forming Liquids. Physical Review Letters, 2007, 99, 135502.	7.8	228
7	Rheology and Ultrasonic Properties of Metallic Glass-Forming Liquids: A Potential Energy Landscape Perspective. MRS Bulletin, 2007, 32, 644-650.	3.5	227
8	Spin polarization in half-metals probed by femtosecond spin excitation. Nature Materials, 2009, 8, 56-61.	27.5	223
9	The Î²-relaxation in metallic glasses. National Science Review, 2014, 1, 429-461.	9.5	199
10	Structural phase transition at the percolation threshold in epitaxial (La0.7Ca0.3MnO3)1â€“x:(MgO)x nanocomposite films. Nature Materials, 2003, 2, 247-252.	27.5	184
11	Correlation between<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math>Relaxation and Self-Diffusion of the Smallest Constituting Atoms in Metallic Glasses. Physical Review Letters, 2012, 109, 095508.	7.8	180
12	Ultrastable Metallic Glass. Advanced Materials, 2013, 25, 5904-5908.	21.0	162
13	Intrinsic Inhomogeneities in Manganite Thin Films Investigated with Scanning Tunneling Spectroscopy. Physical Review Letters, 2002, 89, 237203.	7.8	143
14	Structural rearrangements governing Johari-Goldstein relaxations in metallic glasses. Science Advances, 2017, 3, e1701577.	10.3	132
15	Chemical influence on Î²-relaxations and the formation of molecule-like metallic glasses. Nature Communications, 2013, 4, 2204.	12.8	124
16	Intrinsic giant magnetoresistance of mixed valence Laâ€Aâ€Mn oxide (A=Ca,Sr,Ba) (invited). Journal of Applied Physics, 1994, 76, 6925-6928.	2.5	116
17	Cooperative Shear Model for the Rheology of Glass-Forming Metallic Liquids. Physical Review Letters, 2006, 97, 065502.	7.8	114
18	Merging of the Î± and Î² relaxations and aging via the Johariâ€“Goldstein modes in rapidly quenched metallic glasses. Applied Physics Letters, 2008, 92, .	3.3	93

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19	Preparation of rare-earth manganite-oxide thin films by metalorganic aerosol deposition technique. Applied Physics Letters, 1999, 74, 2842-2844.	3.3	85
20	Indications for an â€œexcess wingâ€•in metallic glasses from the mechanical loss modulus in Zr 65 Al 7.5 Cu 27.5. Europhysics Letters, 2004, 68, 226-232.	2.0	84
21	Negative Refraction Observed in a Metallic Ferromagnet in the Gigahertz Frequency Range. Physical Review Letters, 2007, 98, 197401.	7.8	81
22	Crossover from random three-dimensional avalanches to correlated nano shear bands in metallic glasses. Nature Communications, 2014, 5, 3616.	12.8	78
23	Evidence for a liquidâ€“liquid phase transition in metallic fluids observed by electrostatic levitation. Acta Materialia, 2011, 59, 2166-2171.	7.9	77
24	Shear modulus and compliance in the range of the dynamic glass transition for metallic glasses. European Physical Journal B, 1998, 5, 1-5.	1.5	73
25	Change of Compressiblity at the Glass Transition and Prigogine-Defay Ratio in ZrTiCuNiBe Alloys. Physical Review Letters, 1999, 82, 580-583.	7.8	63
26	Atomic mechanism of internal friction in a model metallic glass. Physical Review B, 2014, 90, .	3.2	56
27	Strong configurational dependence of elastic properties for a binary model metallic glass. Applied Physics Letters, 2006, 89, 151901.	3.3	53
28	Enhanced diffusivity in supercooled liquids. New Journal of Physics, 2007, 9, 36-36.	2.9	53
29	The nature of the Î² -peak in the loss modulus of amorphous solids. Europhysics Letters, 2012, 100, 36003.	2.0	53
30	A-Site Ordering versus Electronic Inhomogeneity in Colossally Magnetoresistive Manganite Films. Physical Review Letters, 2006, 97, 107205.	7.8	51
31	Dynamic Singularity in Multicomponent Glass-Forming Metallic Liquids. Physical Review Letters, 2008, 101, 037801.	7.8	45
32	Anti-Aging in Ultrastable Metallic Glasses. Physical Review Letters, 2018, 120, 135504.	7.8	45
33	Fundamental Link between Î² Relaxation, Excess Wings, and Cage-Breaking in Metallic Glasses. Journal of Physical Chemistry Letters, 2018, 9, 5877-5883.	4.6	44
34	Indications for a slow Î²-relaxation in a fragile metallic glass. Journal of Non-Crystalline Solids, 2006, 352, 5110-5113.	3.1	43
35	How the toughness in metallic glasses depends on topological and chemical heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7053-7058.	7.1	43
36	Thermophysical properties of Si, Ge, and Siâ€“Ge alloy melts measured under microgravity. Applied Physics Letters, 2008, 93, 071902.	3.3	36

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37	Unified Criterion for Temperature-Induced and Strain-Driven Glass Transitions in Metallic Glass. Physical Review Letters, 2015, 115, 135701.	7.8	33
38	Strain induced fragility transition in metallic glass. Nature Communications, 2015, 6, 7179.	12.8	32
39	Electrical nonlinearity in colossal magnetoresistance manganite films: Relevance of correlated polarons. Physical Review B, 2009, 79, .	3.2	29
40	Validity of temperature and time equivalence in metallic glasses during shear deformation. Physical Review B, 2006, 74, .	3.2	24
41	Cytoskeleton remodelling of confluent epithelial cells cultured on porous substrates. Journal of the Royal Society Interface, 2015, 12, 20141057.	3.4	23
42	Formation of two glass phases in binary Cu-Ag liquid. Acta Materialia, 2020, 195, 274-281.	7.9	23
43	Coarse-grained description of localized inelastic deformation in amorphous metals. Applied Physics Letters, 2009, 94, .	3.3	22
44	Use of a double-paddle oscillator for the study of metallic films at high temperatures. Review of Scientific Instruments, 2003, 74, 3395-3399.	1.3	21
45	Dynamical and quasistatic structural relaxation paths in Pd40Ni40P20 glass. Applied Physics Letters, 2009, 95, 201903.	3.3	21
46	Unifying interatomic potential,gâ€‰(r), elasticity, viscosity, and fragility of metallic glasses: analytical model, simulations, and experiments. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 084001.	2.3	21
47	Ultrafast heating of metallic glasses reveals disordering of the amorphous structure. Acta Materialia, 2016, 104, 119-124.	7.9	21
48	Suppression of interface-induced electronic phase separation in all-manganite multilayers by preservation of the Mn-O chain network. Physical Review B, 2004, 69, .	3.2	20
49	Structural recovery in plastic crystals by time-resolved non-linear dielectric spectroscopy. Journal of Chemical Physics, 2015, 142, 154504.	3.0	20
50	First-Order Phase Transition in Liquid Ag to the Heterogeneous G-Phase. Journal of Physical Chemistry Letters, 2020, 11, 632-645.	4.6	20
51	Length scale effects on relaxations in metallic glasses. Journal of Non-Crystalline Solids, 2010, 356, 340-343.	3.1	19
52	Intrinsic antiferromagnetic coupling underlies colossal magnetoresistance effect: Role of correlated polarons. Physical Review B, 2014, 89, .	3.2	19
53	Contactless processing of SiGe-melts in EML under reduced gravity. Npj Microgravity, 2016, 2, 1.	3.7	19
54	Correlation between Viscoelastic Moduli and Atomic Rearrangements in Metallic Glasses. Journal of Physical Chemistry Letters, 2016, 7, 3747-3751.	4.6	18

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55	Jahn-Teller reconstructed surface of the doped manganites shown by means of surface-enhanced Raman spectroscopy. Physical Review Materials, 2019, 3, .	2.4	18
56	Direct imaging of lattice-strain-induced stripe phases in an optimally doped manganite film. Physical Review B, 2007, 75, .	3.2	17
57	Disentangling interatomic repulsion and anharmonicity in the viscosity and fragility of glasses. Physical Review B, 2017, 95, .	3.2	16
58	Stabilizing the Microphase Separation of Block Copolymers by Controlled Photoâ€crosslinking. Macromolecular Chemistry and Physics, 2014, 215, 1563-1572.	2.2	15
59	Universal correlations between the fragility and interparticle repulsion of glass-forming liquids. Journal of Chemical Physics, 2020, 153, 124507.	3.0	14
60	Time-resolved resistive switching on manganite surfaces: Creep and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:msup><mml:mi>f</mml:mi><mml:mi>î±</mml:mi></ signatures indicate pinning of nanoscale domains. Physical Review B, 2013, 87, .	3.2	13
61	Nanoscale resistance switching in manganite thin films: Sharp voltage threshold and pulse-width dependence. Physical Review B, 2010, 82, .	3.2	12
62	Relaxation Processes of Poly(tertâ€butyl acrylate) Chemically Confined via Hydrogen Bonds. Macromolecular Chemistry and Physics, 2010, 211, 1673-1677.	2.2	10
63	Electronâ€lattice correlations and phase transitions in CMR manganites. Annalen Der Physik, 2011, 523, 652-663.	2.4	10
64	Stress and temperature dependence of the avalanche dynamics during creep deformation of metallic glasses. Scientific Reports, 2016, 6, 33503.	3.3	10
65	Interface controlled electronic variations in correlated heterostructures. Physical Review B, 2010, 82, .	3.2	9
66	Influence of stress and temperature on damping behavior of amorphous Pd77.5Cu6.0Si16.5 below Tg. European Physical Journal E, 2011, 34, 91.	1.6	8
67	From ultrafast to slow: Heating rate dependence of the glass transition temperature in metallic systems. Philosophical Magazine Letters, 2016, 96, 454-460.	1.2	8
68	Thermophysical properties of a Si50Ge50 melt measured on board the International Space Station. Npj Microgravity, 2020, 6, 10.	3.7	8
69	The first order L-G phase transition in liquid Ag and Ag-Cu alloys is driven by deviatoric strain. Scripta Materialia, 2021, 194, 113695.	5.2	8
70	Metalâ€“insulator transition and colossal magnetoresistance: relevance of electronâ€“lattice coupling and electronic phase separation. Contemporary Physics, 2007, 48, 349-364.	1.8	7
71	Nonlinear response and avalanche behavior in metallic glasses. European Physical Journal: Special Topics, 2017, 226, 2997-3021.	2.6	7
72	Local mechanical properties of an ultrastable metallic glass. Journal of Physics Condensed Matter, 2020, 32, 345101.	1.8	7

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73	Atomic-scale expressions for viscosity and fragile-strong behavior in metal alloys based on the Zwanzig-Mountain formula. Physical Review Research, 2020, 2, .	3.6	7
74	Predicting structural and dynamical behavior of La-based glasses and melts from the anharmonicity in their interatomic potential. Physical Review B, 2018, 98, .	3.2	6
75	Local atomic order of a metallic glass made visible by scanning tunneling microscopy. Journal of Physics Condensed Matter, 2018, 30, 245702.	1.8	6
76	Anomalous nonlinear damping in metallic glasses: Signature of elasticity breakdown. Journal of Chemical Physics, 2019, 150, 111104.	3.0	6
77	Layer-by-Layer Resistive Switching: Multistate Functionality due to Electric-Field-Induced Healing of Dead Layers. Physical Review Letters, 2019, 122, 136801.	7.8	6
78	Conduction electrons as dissipation channel in friction experiments at the metal-metal transition of LSMO measured by contact-resonance atomic force microscopy. Applied Physics Letters, 2017, 110, 053102.	3.3	5
79	Polaronic Emergent Phases in Manganite-based Heterostructures. Crystals, 2019, 9, 489.	2.2	5
80	Polaronic Contributions to Friction in a Manganite Thin Film. Advanced Science, 2021, 8, 2003524.	11.2	5
81	Switching friction at a manganite surface using electric fields. Physical Review Materials, 2020, 4, .	2.4	4
82	Mechanical spectroscopy of laser deposited polymers. Applied Physics A: Materials Science and Processing, 2008, 93, 599-603.	2.3	2
83	Mechanical avalanches promoted by magnetoelastic coupling in magnetic metallic glasses. Journal of Physics Condensed Matter, 2018, 30, 465803.	1.8	2
84	The Lâ€“G phase transition in binary Cuâ€“Zr metallic liquids. Physical Chemistry Chemical Physics, 2021, 24, 497-506.	2.8	2
85	Laser-induced changes of nonlinear electronic transport properties in La0.75Ba0.25MnO3and (La0.6Pr0.4)0.67Ca0.33MnO3. Journal of Physics Condensed Matter, 2018, 30, 045701.	1.8	1
86	Effect of Chemical Confinement on the mechanical relaxation spectra of poly(ethene-co-methacrylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.3	1
87	Shear Banding in Binary Cu-Zr Metallic Glass: Comparison of the G-Phase With L-Phase. Frontiers in Materials, 2022, 9, .	2.4	1
88	Thermophysical Properties of Semiconductors. Minerals, Metals and Materials Series, 2022, , 403-424.	0.4	0