

Shaban R Ghorbani

List of Publications by Year in descending order

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44
papers

833
citations

567144

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477173

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45
times ranked

1063
citing authors

#	ARTICLE	IF	CITATIONS
1	Very strong intrinsic flux pinning and vortex avalanches in BaFe_2As_2 single crystals. <i>Physical Review B</i> , 2010, 82, .	1.1	137
2	Highly Conductive Carbon Nanotube-Graphene Hybrid Yarn. <i>Advanced Functional Materials</i> , 2014, 24, 5859-5865.	7.8	113
3	Very High Critical Field and Superior J_c Field Performance in $\text{NdFeAsO}_{0.82}\text{F}_{0.18}$ with T_c of 51 K. <i>Advanced Materials</i> , 2009, 21, 236-239.	11.1	68
4	Flux-pinning mechanism in silicone-oil-doped MgB_2 . Evidence for charge-carrier mean free path fluctuation pinning. <i>Physical Review B</i> , 2008, 78, .	1.1	50
5	Preparation and characterization of hybrid conducting polymer-carbon nanotube yarn. <i>Nanoscale</i> , 2012, 4, 940-945.	2.8	50
6	Flux pinning and vortex transitions in doped BaFe_2As_2 single crystals. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	40
7	Hydrostatic pressure: A very effective approach to significantly enhance critical current density in granular iron pnictide superconductors. <i>Scientific Reports</i> , 2015, 5, 8213.	1.6	37
8	Enhancement of the in-field J_c of MgB_2 . <i>Physical Review B</i> , 2010, .	1.1	34
9	The mechanical and the electrical properties of conducting polypyrrole fibers. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	34
10	Coexistence of the J_c and T_c flux pinning mechanisms in nano-Si-doped MgB_2 . <i>Superconductor Science and Technology</i> , 2010, 23, 025019.	1.8	27
11	Giant enhancement in critical current density, up to a hundredfold, in superconducting $\text{NaFe}_0.97\text{Co}_0.03$ As single crystals under hydrostatic pressure. <i>Scientific Reports</i> , 2015, 5, 10606.	1.6	24
12	Vortex-glass phase transition and enhanced flux pinning in C^{4+} -irradiated $\text{BaFe}_{1.9}\text{Ni}_{0.1}\text{As}_2$ superconducting single crystals. <i>Superconductor Science and Technology</i> , 2013, 26, 095014.	1.8	22
13	Fluctuation of mean free path and transition temperature induced vortex pinning in $(\text{Ba},\text{K})\text{Fe}_2\text{As}_2$ superconductors. <i>Applied Physics Letters</i> , 2012, 100, 212601.	1.5	19
14	Angular dependence of pinning potential, upper critical field, and irreversibility field in underdoped $\text{BaFe}_{1.9}\text{Co}_{0.1}\text{As}_2$ single crystal. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	18
15	Hydrostatic pressure induced transition from T_c to T_a , pinning mechanism in MgB_2 . <i>Superconductor Science and Technology</i> , 2015, 28, 055001.	1.8	17
16	Electrochemical performance and complex impedance properties of reduced-graphene oxide/polypyrrole nanofiber nanocomposite. <i>Ionics</i> , 2021, 27, 1279-1290.	1.2	13
17	Iron (II and III) Oxides/Reduced Graphene Oxide/Polypyrrole Ternary Nanocomposite as Electrochemical Supercapacitor Electrode. <i>Journal of the Electrochemical Society</i> , 2021, 168, 030543.	1.3	12
18	Flux pinning mechanism in SiC and nano-C doped MgB_2 : evidence for transformation from T_c to T_b , pinning. <i>Superconductor Science and Technology</i> , 2014, 27, 125003.	1.8	11

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19	Thermoelectric power of charge-neutral $\text{Nd}_{1-x}\text{Ca}_x\text{MxBa}_2\text{Cu}_3\text{O}_{7-y}$ (M=Th and Pr): Evidence for different types of localization. <i>Physical Review B</i> , 2002, 66, .	1.1	10
20	EXCESS FLUCTUATION CONDUCTIVITY AND SUPERCONDUCTING PARAMETERS OF CaLa -DOPED Nd -123. <i>Modern Physics Letters B</i> , 2011, 25, 1915-1924.	1.0	10
21	Fluctuation Conductivity of $\text{RE}_{1-x}\text{Ca}_x\text{M}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-y}$ (RE=Nd, Y and M=Pr, Th) Superconductors. <i>Journal of Superconductivity and Novel Magnetism</i> , 2014, 27, 749-754.	0.8	9
22	The charge transport mechanisms in conducting polymer polypyrrole films and fibers. <i>Materials Research Express</i> , 2018, 5, 105701.	0.8	9
23	Neutron diffraction studies of $\text{Nd}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-y}$: Evidence for hole localization. <i>Physical Review B</i> , 2004, 69, .	1.1	8
24	Strong competition between the $\hat{\Gamma}_1$ and $\hat{\Gamma}_c$ flux pinning mechanisms in MgB_2 doped with carbon containing compounds. <i>Journal of Applied Physics</i> , 2010, 107, 113921.	1.1	7
25	AB-initio study of pressure-induced aluminum hydrides AAlH ₄ (A=Li, Na, K, Rb, Cs). <i>International Journal of Hydrogen Energy</i> , 2017, 42, 25303-25309.	3.8	7
26	Effect of conducting polypyrrole on the transport properties of carbon nanotube yarn. <i>Thin Solid Films</i> , 2012, 520, 7049-7053.	0.8	6
27	Temperature and field dependence of the flux pinning mechanisms in $\text{Fe}_{1.06}\text{Te}_{0.6}\text{Se}_{0.4}$ single crystal. <i>Solid State Communications</i> , 2016, 246, 29-32.	0.9	6
28	In-field Conductivity Fluctuations in $\text{Ba}_{0.72}\text{K}_{0.28}\text{Fe}_2\text{As}_2$ Single Crystals. <i>Journal of Superconductivity and Novel Magnetism</i> , 2018, 31, 2349-2353.	0.8	5
29	The effect of gelatin as a chelating agent on the synthesis and characterization of LiMn_2O_4 nanopowders prepared via sol-gel method. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 88, 465-473.	1.1	5
30	Magnetoresistance mechanisms in carbon-nanotube yarns. <i>Synthetic Metals</i> , 2018, 242, 55-60.	2.1	5
31	On the Determination of Pinning Mechanisms and Regimes in Type-II Superconductors with Weak Thermal Fluctuations. <i>Journal of Superconductivity and Novel Magnetism</i> , 2020, 33, 971-980.	0.8	5
32	Comparison of flux pinning in Si- and SiCl_4 -doped MgB_2 superconductors: evidence for coexistence of different pinning mechanisms. <i>Superconductor Science and Technology</i> , 2015, 28, 125006.	1.8	4
33	Relation between resistivity and temperature in the presence of two magnetic flux pinning mechanisms. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 548, 97-98.	0.6	3
34	Excess conductivity in nano-carbon doped MgB_2 superconductor. <i>European Physical Journal B</i> , 2019, 92, 1.	0.6	2
35	THE NORMAL STATE HALL EFFECT IN $\text{NdBa}_{2-x}\text{La}_x\text{Cu}_3\text{O}_{7-y}$: EVIDENCE FOR HOLE LOCALIZATION BY LA DOPING. <i>International Journal of Modern Physics B</i> , 2009, 23, 5779-5788.	1.0	1
36	Flux pinning mechanism in codoped- MgB_2 with Al_2O_3 and SiC. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 548, 107-108.	0.6	1

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37	LiMn ₂ O ₄ nanopowders synthesized via gelatin-assisted sol-gel method: Optimization of pH and calcination temperature. International Journal of Modern Physics B, 2019, 33, 1950063.	1.0	1
38	Fluctuation Conductivity and Its Scaling Behavior in BaFe _{1.9} Co _{0.1} As ₂ Superconductor. Journal of Superconductivity and Novel Magnetism, 2020, 33, 959-964.	0.8	1
39	Angular Dependence of Fluctuation Conductivity in BaFe _{1.9} Co _{0.1} As ₂ Single Crystal. Journal of Superconductivity and Novel Magnetism, 2020, 33, 2535-2541.	0.8	1
40	Simulation of Light C ⁴⁺ Ion Irradiation and Its Enhancement to the Critical Current Density in BaFe _{1.9} Ni _{0.1} As ₂ Single Crystals. Science of Advanced Materials, 2014, 6, 1650-1654.	0.1	1
41	Disorder Driven Localization in Charge Neutrally Doped 123 Superconductors. AIP Conference Proceedings, 2006, , .	0.3	0
42	The Effect of Anisotropy of H _{c2} on Transport Current in Silicone Oil-Doped MgB ₂ Superconductor. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1737-1741.	0.8	0
43	Low-index surface investigation of KAlH ₄ : Theoretical attempt to study the surface effect on the hydrogen storage properties. International Journal of Hydrogen Energy, 2018, 43, 8835-8845.	3.8	0
44	The second peak effect and vortex pinning mechanisms in Ba(Fe,Ni) ₂ As ₂ superconductors. Solid State Communications, 2017, 264, 6-9.	0.9	0