## Nawazish A Khan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/11432044/publications.pdf

Version: 2024-02-01

		304368	454577
196	1,839	22	30
papers	citations	h-index	g-index
196	196	196	562
all docs	docs citations	times ranked	citing authors
<b>u</b> oco			ording uddinord

#	Article	IF	CITATIONS
1	Enhanced superconducting properties of Cu1-xTlxBa2Ca2-yMgyCu3O10- $\hat{l}$ (y=0, 0.5, 1.0, and 1.5). Applied Physics Letters, 2005, 86, 152502.	1.5	62
2	Effects of post-annealing on the infrared active phonon modes of low anisotropy (γ=5–11) Cu1â^'xTlxBa2Ca2Cu3O10â^'Î′ superconductor thin films. Physica C: Superconductivity and Its Applications, 2004, 407, 23-30.	0.6	43
3	Superconductivity in Be substituted by Ca in Cu0.5Tl0.5Ba2Canâ^'1â^'yBeyCunO2n+4â^'δ (n=3,4 and) Tj ETQq1 I	1 0.784314 0.6	ł rgBT /Ov <mark>eri</mark> 42
4	Frequency dependent dielectric properties of Cu0.5Tl0.5Ba2Ca2Cu3â^'yZnyO10â^'δ (y=, 1.0, 1.5,2.0, 2.5) superconductors. Journal of Applied Physics, 2008, 104, .	1.1	40
5	Simple method for direct synthesis of YBa2Cu4O8at atmospheric oxygen pressure. Applied Physics Letters, 1993, 63, 257-259.	1.5	38
6	The study of phonon modes of Cu1â^'xTlxBa2Ca3Cu4O12â^'y superconductor thin films by FTIR absorption spectroscopy. Physica C: Superconductivity and Its Applications, 2004, 407, 103-114.	0.6	37
7	Effect of Ge4+ and Mg2+ doping on superconductivity, fluctuation induced conductivity and interplanar coupling of TISr2CaCu2O7â^î superconductors. Physica C: Superconductivity and Its Applications, 2011, 471, 363-372.	0.6	34
8	Amorphous to crystalline phase transformation and band gap refinement in ZnSe thin films. Thin Solid Films, 2018, 648, 31-38.	0.8	34
9	The study of inter-plane coupling in Cu0.5Tl0.5Ba2Ca2Cu3O10â~δsuperconductor by Mg and Pr substitution at Ca site. Physica C: Superconductivity and Its Applications, 2005, 425, 90-96.	0.6	33
10	Preparation of biaxially oriented TlCu-1234 thin films. Physica C: Superconductivity and Its Applications, 1999, 320, 39-44.	0.6	32
11	Superparamagnetic bimetallic iron–palladium nanoalloy: synthesis and characterization. Nanotechnology, 2008, 19, 185608.	1.3	32
12	A simple method for the normal pressure synthesis of Cu1â^'xTlxBa2Ca3Cu4O12â^'Î' superconductor. Physica C: Superconductivity and Its Applications, 2005, 422, 9-15.	0.6	29
13	The effect of grain size on the fluctuation-induced conductivity of Cu1â^'xTlxBa2Ca3Cu4O12â^'Î'superconductor thin films. Superconductor Science and Technology, 2007, 20, 742-747.	1.8	29
14	A new Cu0.5Tl0.5Ba2Ca2Cu3â^'yZnyO10â^'Îhigh-temperature superconductor with three ZnO2planes. Superconductor Science and Technology, 2006, 19, 762-766.	1.8	28
15	Study of the intergranular coupling of Cu0.5Tl0.5Ba2Ca2â^'yMgyCu3O10â^'Î(y= 0, 0.5, 1.0 and 1.5) superconductors. Superconductor Science and Technology, 2006, 19, 679-684.	1.8	28
16	Mechanism of decomposition of cuprous cyanide. Infrared and thermal evidence. Chemistry of Materials, 1993, 5, 1283-1286.	3.2	26
17	Phonon modes of Cu1â°'xTlx-1234 superconductor thin films. Physica B: Condensed Matter, 2004, 349, 156-158.	1.3	25
18	Dielectric properties of Cu0.5Tl0.5Ba2Ca3Cu4O12â^Î^bulk superconductor. Physica C: Superconductivity and Its Applications, 2009, 469, 728-731.	0.6	24

#	Article	IF	CITATIONS
19	Different regions of fluctuation conductivity in Sn-doped Cu0.5Tl0.5Ba2Ca2Cu3â^'ySnyO10â^'δ superconductors. Physica B: Condensed Matter, 2010, 405, 1541-1545.	1.3	24
20	Enhanced superconductivity by Mg doping in Cu1â^'xTlxBa2Ca2â^'yMgyCu0.5Zn2.5O10â^'Î'. Materials Letters, 2008, 62, 659-662.	1.3	23
21	Superconducting fluctuation behavior and infrared absorption properties of Tl1â^'Cu Sr1.6Yb0.4CaCu2O7 and Tl0.5Pb0.5Sr2â^'Mg Ca0.8Yb0.2Cu2O7â^' ceramics. Journal of Alloys and Compounds, 2010, 492, 473-481.	2.8	23
22	Doping of the CuO2 planes of Cu $1\hat{a}$ °xTlxBa2Ca2Cu3O10 $\hat{a}$ °y superconductor via light and heavier ions. Physica C: Superconductivity and Its Applications, 2003, 398, 114-122.	0.6	22
23	Frequency dependent dielectric properties of Cu0.5Tl0.5Ba2Ca2(Cu3-yMy)O10-δsuperconductor. Journal of Applied Physics, 2012, 111, .	1.1	22
24	Study of CuO Nano-particles/CuTl-1223 Superconductor Composite. Journal of Low Temperature Physics, 2013, 170, 185-204.	0.6	22
25	Growth kinetics of Cu1â^'xTlxBa2Ca3Cu4O12â^'ythin films. Superconductor Science and Technology, 2002, 15, 613-618.	1.8	21
26	Growth kinetics of $Cu1\hat{a}^2xTlxBa2Ca2Cu3O10\hat{a}^2y$ thin films. Physica C: Superconductivity and Its Applications, 2002, 377, 43-48.	0.6	21
27	Study of nano-sized (ZnFe2O4)y particles/CuTl-1223 superconductor composites. Solid State Sciences, 2013, 22, 21-26.	1.5	21
28	Improved interplane and intergranular coupling by Mg doping at Ca site in Cu0.5Tl0.5Ba2Ca2(Cu0.5Zn2.5)O10â~δsuperconductor. Journal of Applied Physics, 2008, 103, 083913.	1.1	20
29	Enhanced superconductivity in Cu0.5Tl0.5Ba2Canâ^'1â^'yBeyCunO2n+4â^'Î $^{\prime}$ (, 4 and , 1.5, 1.7, 2.0) system with oxygen doping. Journal of Physics and Chemistry of Solids, 2006, 67, 1841-1849.	1.9	19
30	Magnetic ion doped Cu1â^'xTlxBa2Ca2â^'yMgyCu1.5Ni1.5O10â^'Î' (y=0, 0.5, 1.0, 1.5) superconductors and their improved inter-plane coupling. Physica C: Superconductivity and Its Applications, 2007, 466, 106-110.	0.6	19
31	Role of annealing temperature of nickel oxide (NiOx) as hole transport layer in work function alignment with perovskite. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	19
32	Superconducting properties of Cd doped Cu0.5Tl0.5Ba2Ca3Cu4â^'yCdyO12â^'Î' (y=0, 0.25, 0.5, 0.75, 1.0) superconductors. Journal of Alloys and Compounds, 2009, 481, 81-86.	2.8	18
33	Role of anti-ferromagnetic Cr nanoparticles in CuTl-1223 superconducting matrix. Journal of Alloys and Compounds, 2015, 649, 320-326.	2.8	18
34	Suppression of anti-ferromagnetism by enhanced solubility of Ni in Cu1â^'xTlxBa2Ca2Cu3â^'yNiyO10â^'Î^ (y=0,) Tj	ETQq0 0 (	O rgBT /Over
35	Single and multi-walled carbon nanotubes doped (Cu0.5Tl0.5)Ba2Ca2Cu3O10â^δsuperconductors. Journal of Alloys and Compounds, 2012, 538, 183-188.	2.8	17
36	Enhanced Inter-grain Connectivity in Nano-particles Doped (Cu0.5Tl0.5)Ba2Ca2Cu3O10â^'Î' Superconductors. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1725-1733.	0.8	17

#	Article	IF	Citations
37	Reduced anti-ferromagnetism promoted by Zn 3d10 substitution at CuO2 planar sites of CuO.5Tl0.5Ba2Ca3Cu4O12â'î' superconductors. Physica B: Condensed Matter, 2009, 404, 3973-3977.	1.3	16
38	Growth of Cu0.5Tl0.5Ba2Ca3Cu4â^'yZnyO12â^'Î' superconductor with optimum carriers. Physica C: Superconductivity and Its Applications, 2010, 470, 428-434.	0.6	16
39	Optimization of carriers by self-doping in Cu0.5Tl0.5Ba2Ca2Cu3â^'yMyO10â^'Î' superconductor. Journal of Applied Physics, 2010, 107, .	1.1	16
40	Absence of pair breaking effect in Cu0.5Tl0.5Ba2Ca2Cu3â^'yZnyO10â^'Î'(yÂ=Â0, 0.75, 1.5, 2.25, 2.5, 2.65) superconductor. EPJ Applied Physics, 2007, 38, 47-51.	0.3	15
41	Studies of the phonon modes and superconducting properties of Cu <sub>0.5</sub> Tl <sub>0.5</sub> Ba <sub>2</sub> Ca <sub>2</sub> Cu <sub>&gt;3â°'<i>y</i></sub> Zn <sub><i>y</i></sub>	/≥.8/sub	>O <b>xs</b> ub>10â
42	Structure and superconducting properties of Fe-doped Cu0.5Tl0.5Ba2Ca2Cu3â^'yFeyO10â^'δ (y=0, 0.02, 0.03,)	Гј Е <u>Т</u> Qq0 (	O O fgBT /Ove
43	Suppression of Superconductivity Due to Enhanced Co Doping inÂCu0.5Tl0.5Ba2Ca2Cu3â^'y Co y O10â^'Î Superconductors. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1521-1526.	0.8	15
44	Synthesis and characterization of core–shell Ni/NiO nanoparticles/CuTl-1223 superconductor composites. Ceramics International, 2014, 40, 13819-13825.	2.3	15
45	X-ray photoemission studies of Zn doped Cu1â^'xTlxBa2Ca2Cu 3â^'yZnyO10â^'δ (y=0, 2.65) superconductors. Physica C: Superconductivity and Its Applications, 2007, 453, 46-51.	0.6	14
46	Effect on Diamagnetism and Phonon Modes due to Mg and Be Doping at Ca Sites in Cu0.5Tl0.5Ba2Ca3â^'y M y Cu4O12â^'Î' (y=0 and 1.5 for M=Mg, Be) High Temperature Superconductors. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1977-1983.	0.8	14
47	Electrical and infrared characterization of the semiconducting phases of YBa2Cu3O6+x. Solid State Communications, 1994, 92, 607-611.	0.9	13
48	Synthesis of Cu1â^'xTlxBa2Ca2Cu3O11â^'y (xâ^¼0.7) superconductor by hot press. Physica C: Superconductivity and Its Applications, 1998, 302, 137-142.	0.6	13
49	Normal pressure synthesis of Cu1â°'xTlxBa2Ca2Cu3O10â^'Î' superconductor. Physica C: Superconductivity and Its Applications, 2005, 417, 119-126.	0.6	13
50	X-ray photo-emission studies of Cu1â°'xTlxBa2Ca3Cu4O12â°'y superconductor thin films. Physica C: Superconductivity and Its Applications, 2006, 449, 47-52.	0.6	13
51	How Grain-Boundaries Influence the Intergranular Critical Current Density of Cu1â^'x Tl x Ba2Ca3Cu4O12â^'δSuperconductor Thin Films?. Journal of Low Temperature Physics, 2008, 151, 1221-1229.	0.6	13
52	Fluctuation-induced conductivity of polycrystalline Ni doped Cu0.5Tl0.5Ba2Ca2Cu3â^'yNiyO10â^'δ (y=0, 0.5,) Tj	ETQq0 0 (	0 rgBJT /Overlo
53	Cd-Doped Cu0.5Tl0.5Ba2Ca2Cu3â^'y Cd y O10â^'Î' (y=0,0.5,1.0,1.5,2.0) Superconductors. Journal of Superconductivity and Novel Magnetism, 2010, 23, 199-204.	0.8	13
54	Studies of fluctuation induce conductivity of Mg doped Cu0.5Tl0.5Ba2(Ca2â^'yMgy)(Cu0.5Zn2.5)O10â^'δ (y=0, 0.5, 1.0) superconductors. Physica B: Condensed Matter, 2010, 405, 2772-2780.	1.3	13

#	Article	IF	CITATIONS
55	Fluctuation induced conductivity in (Cu0.5Tl0.5a^'xKx)Ba2Ca3Cu4O12a^'Î superconductor. Journal of Applied Physics, 2011, 109, 023906.	1.1	13
56	Superconducting fluctuation and infrared absorption of Cd-substituted Tl0.9Bi0.1Sr1.8Yb0.2Ca1â^'xCdxCu1.99Fe0.01O7â^'δ ceramics. Ceramics International, 2013, 39, S257-S261.	2.3	13
57	The Role of Mass of Doped Atoms in the Superconductivity of Cu0.5Tl0.5Ba2Ca2Cu3O10â^'d and Cu0.5Tl0.5Ba2Ca2Cu1.5 M1.5O10â^'d (M = Cd, Zn, and Ni). Journal of Superconductivity and Novel Magnetism, 2017, 30, 1153-1160.	0.8	13
58	Cu0.5Tl0.5Ba2Ca3Cu4â^'y Zn y O12â^ $\hat{l}$ (y=0, 1.0, 2.0, 3.0, 3.5): Superconductor with Four ZnO2 Planes. Journal of Low Temperature Physics, 2007, 149, 97-103.	0.6	12
59	(Cu0.5Tl0.5)Ba2Canâ^'1Cunâ^'yGeyO2n+4â^'Î' (n=3, 4 and y=0.5, 0.75, 1.0); superconductors with GeO2 planes. Physica C: Superconductivity and Its Applications, 2008, 468, 2341-2344.	0.6	12
60	Pyrolysis mechanism of trisbipyridineiron(II) chloride to iron nanoparticles. Journal of Thermal Analysis and Calorimetry, 2012, 110, 707-713.	2.0	12
61	ZnSe/ITO thin films: candidate for CdTe solar cell window layer. Journal of Semiconductors, 2017, 38, 093001.	2.0	12
62	Perovskite phase formation in formamidinium–methylammonium lead iodide bromide (FAPbI3)1-x(MAPbBr3)x materials and their morphological, optical and photovoltaic properties. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	12
63	Synthesis and study of Raman active modes of Cu1â^'xTlxBa2CaCu2O8â^'y superconductor thin films. Physica C: Superconductivity and Its Applications, 2004, 403, 247-251.	0.6	11
64	Fluctuation induced conductivity analyses of Cd doped Cu0.5Tl0.5Ba2Ca2Cu3â^'yCdyO10â^'Î' (y=0, 0.5, 1.0,) Tj E	Г <u>О</u> дО 0 0 r	gBT /Overlo
65	Weak-link behaviour of Cu1â^'xTlxBa2Ca3Cu4O12â^'ysuperconductor thin films. Superconductor Science and Technology, 2006, 19, 410-414.	1.8	10
66	Intergranular coupling of the Cu <sub>0.5</sub> 1.52.5222223.53.54.55.55.56.56.57.57.58.59.59.59.59.59.59.59.59.59.59.59.59.5 <td>sub<b>§</b>10â^'δ</td> <td>&lt;1sub&gt;super</td>	sub <b>§</b> 10â^'δ	<1sub>super
67	AC-susceptibility measurements of Cu1â^'xTlxBa2Ca3Cu4O12â^'Î' superconductor thin films with different thallium content. Physica C: Superconductivity and Its Applications, 2008, 468, 233-236.	0.6	10
68	Enhanced inter-plane coupling of Mg doped Cu0.5Tl0.5Ba2Ca2â^'xMgxCu3O10â^'δ superconductors: XPS and FTIR studies. Physica C: Superconductivity and Its Applications, 2008, 468, 405-410.	0.6	10
69	Suppression of Tc in Co-doped (Cu0.5Tl0.5)Ba2Ca2Cu3â^'xCoxO10â^'Î' superconductor. Journal of Alloys and Compounds, 2010, 507, 142-145.	2.8	10
70	Suppressed phonon density and Para conductivity of Cd doped Cu0.5Tl0.5Ba2Ca3Cu4â^'yCdyO12â^'δ (y=0,) Tj ET	QqQ 0 0 r <sub>ξ</sub>	зВТ /Overloc
71	Study of Mg-doped (Cu0.5Tl0.5)Ba2(Ca2â^'yMgy)(Cu2.5Cd0.5)O10â^'Î' (y=0, 0.05, 0.1, 0.25, 0.5, 0.75, 1.0) superconductors. Journal of Alloys and Compounds, 2013, 572, 74-78.	2.8	10
72	Highly efficient and stable inverted perovskite solar cells with two-dimensional ZnSe deposited using a thermal evaporator for electron collection. Journal of Materials Chemistry A, 2018, 6, 22713-22720.	5.2	10

#	Article	IF	Citations
73	Superconducting properties of Cu1-xTlxBa2Ca3Cu4O12-ythin films. Superconductor Science and Technology, 2001, 14, 603-606.	1.8	9
74	Excess-conductivity analysis of Mg- and Be-doped polycrystalline Cu0.5Tl0.5Ba2Ca1.5M1.5Cu4O12â~δ (M=,) T	j ETQq0	0 0 rgBT /Overlo
75	Dielectric response of Cu0.5Tl0.5Ba2(Ca2â^'yMgy)(Cu0.5Zn2.5)O10â^'Î' bulk superconductor to frequency and temperature. Physica C: Superconductivity and Its Applications, 2009, 469, 182-187.	0.6	9
76	Flux pinning in Tl1â^'xCxBa2Ca3Cu4O12â^'δ superconductor. Physica C: Superconductivity and Its Applications, 2012, 480, 19-22.	0.6	9
77	Excess conductivity of Pb-doped (Cu0.5â^'xPbxTl0.5)Ba2Ca2Cu3O10â^'Î' superconductors. Physica C: Superconductivity and Its Applications, 2012, 474, 29-33.	0.6	9
78	XPS studies of Cu1â^'xTlxBa2Ca2Cu3O10â^'y superconductor thin films. Physica C: Superconductivity and Its Applications, 2005, 433, 21-27.	0.6	8
79	Self-doping Effects on the Superconducting Properties of Cu0.5Tl0.25M0.25Ba2Ca2Cu3O10 $\hat{a}^{\gamma}\hat{l}^{\gamma}$ (M = Bi, Hg,) $\hat{l}^{\gamma}$	Тј ЕТ <u>О</u> д1	1 0.784314 rgB
80	Effect of Mg doping in enhancing superconductivity in Ni doped (Cu0.5Tl0.25Li0.25)Ba2Ca2â^'yMgy (Cu1.5Ni1.5)O10â^'Î^ (y=0, 0.5, 1.0, 1.5) superconductors. Journal of Alloys and Compounds, 2008, 464, 550-555.	2.8	8
81	Intercomparison of Fluctuation Induced Conductivity of Cu0.5Tl0.5Ba2Canâ^1CunO2n+4â^1y (n=2,3,4) superconductor thin films. Physica C: Superconductivity and Its Applications, 2009, 469, 279-282.	0.6	8
82	Superconductivity in Co doped Cu0.5Tl0.5Ba2(CaM)Cu2.95Co0.05O10 $\hat{a}^{\gamma}\hat{l}^{\gamma}$ (M=Mg, Be) samples. Journal of Alloys and Compounds, 2009, 481, 65-69.	2.8	8
83	Temperature and Frequency Dependent Dielectric Properties of Cu0.5Tl0.5Ba2Ca3(Cu4â^'y Cd y )O12â^'δ Bulk Superconductor. Journal of Low Temperature Physics, 2013, 172, 47-58.	0.6	8
84	Revival of Metal-Insulator and Ferromagnetic-Paramagnetic Transitions by Ni Substitution at Mn Site in Charge-Ordered Monovalent Doped Nd0.75Na0.25MnO3 Manganites. Journal of Superconductivity and Novel Magnetism, 2018, 31, 2851-2868.	0.8	8
85	Enhanced coherence length and interplane coupling by Ti doping in (Cu, Tl)-1223 superconductors: Para conductivity analyses. Ceramics International, 2020, 46, 3218-3223.	2.3	8
86	Y-Ba-Cu (1-2-3) superconductor starting with copper cyanide. Journal of Materials Science Letters, 1991, 10, 1182-1183.	0.5	7
87	Low-resistivity contacts to the surface of superconductor thin films. Superconductor Science and Technology, 2002, 15, 29-31.	1.8	7
88	A novel method for the direct synthesis of the Y2Ba4Cu7O15â~xsuperconductor. Superconductor Science and Technology, 2002, 15, 577-580.	1.8	7
89	The role of Nb substitution in Cu1â^'xTlxBa2Ca2â^'yNbyCu3O10â^'δ (y=0, 0.25,0.5,0.75,1.0) superconductor. Physica C: Superconductivity and Its Applications, 2006, 449, 21-28.	0.6	7
90	Effect of K-doping to the weak link behaviour of (Cu0.5Tl0.5â^'xKx)Ba2Ca2Cu3O10â^'δ superconductors. Physica C: Superconductivity and Its Applications, 2010, 470, 51-54.	0.6	7

#	Article	IF	Citations
91	Dielectric properties of (CuO, CaO2, and BaO)y/CuTl-1223 composites. Low Temperature Physics, 2013, 39, 622-629.	0.2	7
92	Grain Boundary Shortening in CuTl-1234 Superconductor by the Addition of ZnO Nanoparticles. Journal of Superconductivity and Novel Magnetism, 2018, 31, 1669-1675.	0.8	7
93	Increased Solubility of Mg at Ca Site inÂCu0.5Tl0.5Ba2Ca2Cu3O10â^'δ Superconductor. Journal of Superconductivity and Novel Magnetism, 2007, 20, 343-347.	0.8	6
94	Enhancement of superconducting properties in Cu0.5Tl0.5Ba2Ca0.5M1.5Cu1.5Ni1.5O10â^'Î^ (M=Mg, Be) superconductors. Materials Chemistry and Physics, 2008, 112, 412-416.	2.0	6
95	Enhanced superconductivity by Na doping in (Cu0.5Tl0.25Na0.25)Ba2Ca2Cu3O10â^Î. Journal of Alloys and Compounds, 2009, 475, 652-657.	2.8	6
96	Study of phonon modes and superconducting properties of the oxygen post-annealed (Cu0.5Tl0.5)Ba2Canâ^'1(Cunâ^'yGey)O2n+4â^'l' (n=3, 4 and y=0, 0.5, 0.75, 1.0) superconductors. Cryogenics, 2010, 50, 61-65.	0.9	6
97	Fluctuation-induced conductivity analyses of Be-doped (Bi0.25Cu0.25Li0.25Tl0.25)Ba2Ca2Cu3O10-Î′ superconductors in the critical regime and beyond. Journal of Applied Physics, 2012, 111, 033917.	1.1	6
98	Ti-doped (Cu0.5Tl0.5)Ba2Ca2 (Cu3â^'xTix)O10â^'î^ (x=0, 0.25, 0.50, 0.75) superconductors. Physica C: Superconductivity and Its Applications, 2013, 488, 35-38.	0.6	6
99	Enhanced Magnetic Properties in Cu0.5Tl0.5Ba2Ca2Cu3O10â^î^î Superconductor Doped with Carbon Nanotubes. Journal of Superconductivity and Novel Magnetism, 2014, 27, 2427-2434.	0.8	6
100	Modified synthesis route to achieve Sr substituted Cu 0.5 Tl 0.5 -1234 superconductor phase. Materials Chemistry and Physics, 2016, 181, 384-390.	2.0	6
101	Excess Conductivity Analysis of Cu0.5Tl0.5Ba2Ca $n\hat{a}^{1}$ Cu $n = 2, 3, 4$ Thin Films. Journal of Superconductivity and Novel Magnetism, 2017, 30, 1493-1498.	0.8	6
102	The reduced weak links in Cu0.5Tl0.5Ba2Ca4â^'xMgxCu5O14â^'δ (x=1, 2 and 3) superconductors. Journal of Alloys and Compounds, 2007, 432, 49-54.	2.8	5
103	Excess conductivity of Cu0.5Tl0.5Ba2Ca1Cu2O8â <sup>~</sup> Îthin films induced by thermal fluctuation: importance of 3D fluctuations. Journal of Physics Condensed Matter, 2008, 20, 045216.	0.7	5
104	Improvement of superconductivity with the reduced anti-ferromagnetism in Zn-doped CuTl-1223 superconductors. Physica Scripta, 2009, 80, 025702.	1.2	5
105	Superconductivity and Electron–Phonon Interaction inÂCu0.5Tl0.5Ba2Ca2Cu3â^'y M y O10â^'δ (M=0, Si, Ge,) Ţ	j ETQq1	1 0 <sub>5</sub> 784314 n
106	Resistive transition in Mn doped Cu0.5Tl0.5Ba2Ca2Cu3O10-y superconductor. Solid State Sciences, 2011, 13, 2142-2145.	1.5	5
107	Critical regime and suppression of the pseudo-gap in Cu0.5Tl0.5Ba2Ca3Cu4â^'yZnyO12â^'Î' superconductors via excess conductivity analyses. Physica C: Superconductivity and Its Applications, 2012, 478, 32-37.	0.6	5
108	Fluctuation Induced Conductivity in (Cu0.5Tl0.5)Ba2Ca2Cu3O10â <sup>-1</sup> δSuperconductor Synthesized at Different Temperatures. Journal of Low Temperature Physics, 2012, 167, 74-82.	0.6	5

#	Article	IF	CITATIONS
109	Infrared absorption spectroscopy and fluctuations induced conductivity (FIC) analysis of Be-doped TlBa2Ca2Cu3O10a~l´ superconductor. Ceramics International, 2014, 40, 6655-6662.	2.3	5
110	Excess conductivity analysis of heavy ions irradiated TlBa2(Ca2â^'Mg )Cu3O10â^' superconductor. Physica B: Condensed Matter, 2015, 457, 113-116.	1.3	5
111	Post deposition annealing: a route to bandgap tailoring of ZnSe thin films. Journal of Materials Science: Materials in Electronics, 2016, 27, 9755-9760.	1.1	5
112	Flux Pinning Characteristics and Irreversibility Field of Cu0.5Tl0.5Ba2Ca3Cu4O12â^'Î' thin films. Journal of Superconductivity and Novel Magnetism, 2019, 32, 1163-1170.	0.8	5
113	Effect of Magnesium Doping to Reduce the Charge Reservoir Layer in Cu0.5Tl0.5(Ba2â^'xMgx)Ca2Cu3Oy (x = 0, 0.15, 0.25, 0.35) Superconductors. Journal of Electronic Materials, 2021, 50, 2164-2170.	1.0	5
114	The (Cu0.5Tl0.5)Ba2O4â^î^ charge reservoir layer as an efficient source of carriers to the CuO2 planes: Doping of Bi in (Cu0.5Tl0.5)Ba2Ca2Cu3O10â^î superconductors. Physica C: Superconductivity and Its Applications, 2009, 469, 139-146.	0.6	4
115	Superconductivity in Co and Li Substituted Cu0.5Tl0.5Ba2Ca2Cu3â^'x Co x O10â^'δ. Journal of Low Temperature Physics, 2011, 163, 203-213.	0.6	4
116	Enhanced Superconductivity inÂ(Cu0.5Tl0.25M0.25)Ba2Ca2Cu3O10â^'Î' Samples. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1547-1551.	0.8	4
117	Optimum Synthesis Temperature of (Cu1â^'x Tl x )Ba2Ca3Cu4O12â^'δ Superconductor. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1653-1657.	0.8	4
118	Enhancing Superconductivity in Low-dimensional TlBa2Ca2Cu3O10â^Î System. Journal of Superconductivity and Novel Magnetism, 2012, 25, 2271-2279.	0.8	4
119	Influence of Ce Substitution at Sr-Site on Superconducting Fluctuation Behavior and Infrared Absorption of Tl0.9Bi0.1Sr2â^'x Ce x Ca0.9Y0.1Cu1.99Fe0.01O7â^'δ (x=0â€"0.20) Ceramics. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1849-1856.	0.8	4
120	Dielectric properties of oxygen post-annealed Cu0.5Tl0.5Ba2Ca3(Cu4â^'yCdy)O12â^'Î' bulk superconductor. Ceramics International, 2013, 39, 9591-9598.	2.3	4
121	Atmospheric pressure synthesis of Be- and Mg-doped TlBa2Ca2Cu3O10â^' superconductor. Ceramics International, 2013, 39, 1901-1908.	2.3	4
122	Excess conductivity analyses of (Cu0.5Tl0.5)Ba2Ca3Cu4O12â^δthin film samples synthesized at different temperatures and post-annealed in flowing nitrogen atmosphere. Journal of Materials Science: Materials in Electronics, 2018, 29, 2209-2215.	1.1	4
123	Low frequency dielectric response of Cu0.5Tl0.5Ba2Ca2Cu3-xMxO10-δ (MÂ= Cd, Zn, Ni; x=0, 1.5) superconductors. Journal of Alloys and Compounds, 2018, 757, 476-483.	2.8	4
124	Study of Carrier Transfer Mechanism When Substituting Strontium at Barium Sites in CuTl-1223 Superconducting Phase. Journal of Electronic Materials, 2021, 50, 4034-4040.	1.0	4
125	Normal pressure synthesis of Mg-doped Cu0.5Tl0.5Ba2Ca2Mg2Cu5O14â^δsuperconductor. Physica C: Superconductivity and Its Applications, 2007, 455, 63-66.	0.6	3
126	Enhanced superconducting properties of Cu0.5(Tl0.5â°'yHgy)Ba2Ca3Cu4O12â°'Î′ (y=0, 0.15, 0.25, 0.35) superconductor. Journal of Alloys and Compounds, 2008, 452, 435-440.	2.8	3

#	Article	IF	Citations
127	Weak link behavior of Be doped (Cu0.5K0.25Tl0.25)Ba2(Ca3â^'xBex)Cu4O12â^'Î' superconductors. Journal of Applied Physics, 2009, 105, 113923.	1.1	3
128	Weak link behavior of Sn doped (Cu0.5Tl0.5)Ba2Ca2(Cu3â^'xSnx)O10â^'Î' superconductors. Journal of Alloys and Compounds, 2009, 487, 243-252.	2.8	3
129	Effect of Pb Doping on the Superconducting Properties ofÂ(Cu0.5â^'x Pb x Tl0.5)Ba2Ca2Cu3O10â^'δ. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1281-1287.	0.8	3
130	Improvement of Superconductivity with the Modification of Charge Reservoir Layer in (Cu0.5Tl0.5â^'x M) Tj ETQq(	0	/gverlock 10
131	Effect of ion irradiation induced defects on the excess conductivity of Cu1â^'xTlxBa2Ca1Cu2O8â^'Î' superconductor thin films. Physica C: Superconductivity and Its Applications, 2011, 471, 35-41.	0.6	3
132	HOW <font>Ge</font> DOPING AFFECTS THE SUPERCONDUCTING PROPERTIES OF ( <font>Cu</font> ,) Tj ETQqC 3853-3861.	0 0 0 rgBT 1.0	Overlock 10
133	Annealing effect on the excess conductivity of Cu0.5Tl0.25M0.25Ba2Ca2Cu3O10â^´Î´ (M = K, Na, Li, Tl) superconductors. Journal of Applied Physics, 2012, 111, .	1.1	3
134	Para-conductivity and critical regime of (Tl1â^'xCx)Ba2Ca3Cu4O12â^'Î' superconductors. Journal of Applied Physics, 2012, 112, 033912.	1.1	3
135	Magneto-resistance and Excess Conductivity Studies of Tl(Ba2â^'y Mg y )Ca 2 Cu 3 O 10â^'Î^ Samples. Journal of Superconductivity and Novel Magnetism, 2014, 27, 2787-2794.	0.8	3
136	Suppression of 3D mobility of carrier and superconductivity by Y+3 substitution in Cu0.5Tl0.5Ba2(Ca2â^'xYx)Cu3O10â^'Î' samples. Ceramics International, 2014, 40, 4187-4191.	2.3	3
137	Infield superconductivity of carbon nanotubes-Cu0.5Tl0.5Ba2Ca2Cu3O10â^Î superconductor composites. AIP Advances, 2015, 5, 107148.	0.6	3
138	Enhancement of Inter-plane Coupling and Superconductivity in Cu0.5Tl0.5Ba2(Ca3â^'yM y )Cu4O12â^'Î^ (M =) Tj E 2253-2260.	TQq0 0 0 0.8	rgBT /Overlo
139	Jahn-Teller Distortions and Infield Superconductivity of CuTl-1223 Phase. Journal of Superconductivity and Novel Magnetism, 2020, 33, 331-336.	0.8	3
140	Suppression of Superconductivity by Anharmonic Oscillations in Zn- or Ni-doped Cu0.5Tl0.5Ba2(CaMg)Cu1.5M1.5O10-Î′ (M=Zn, Ni) Superconductors; Evident by Magnetic Measurements. Journal of Electronic Materials, 2021, 50, 6518-6524.	1.0	3
141	Excess Conductivity Analysis of Y-Ba-Cu–O Superconductor Phases. Journal of Low Temperature Physics, 2022, 206, 106-119.	0.6	3
142	Enhanced Superconductivity inÂ(Cu0.5Tl0.25Cs0.25)Ba2Ca2Cu3O10â~δ by Cs Doping. Journal of Low Temperature Physics, 2008, 153, 26-34.	0.6	2
143	Homogeneous distribution of carriers in the conducting planes by Zn substitution at Cu sites in Cu0.5Tl0.5Ba2Ca3Cu4O12â^î^superconductors. Low Temperature Physics, 2010, 36, 154-158.	0.2	2
144	Si doped Cu0.5Tl0.5Ba2Ca2Cu3O10â^î^superconductors. Journal of Physics and Chemistry of Solids, 2011, 72, 755-760.	1.9	2

#	Article	IF	CITATIONS
145	Effect of paramagnetic Mn ion on the superconductivity of Cu0.5Tl0.5Ba2Ca2â^xMnxCu3O10â^y. Journal of Applied Physics, 2012, 112, 073920.	1.1	2
146	Normal pressure synthesis of (Tl1â^'yCy)Ba2Ca3Cu4O12â^'δ superconductor. Solid State Sciences, 2012, 14, 1458-1461.	1.5	2
147	Excess Conductivity Analysis and the Critical Region in Be-Doped Cu0.5Tl0.5Ba2Ca1â^'y Be y Cu0.5Zn1.5O8â^'δ Superconductors. Journal of Superconductivity and Novel Magnetism, 2012, 25, 975-982.	0.8	2
148	Irradiation hardening of Mg-doped TlBa 2 (Ca 2â^'y Mg y )Cu 3 O 10â^'Î^ superconductors. Radiation Physics and Chemistry, 2015, 112, 145-150.	1.4	2
149	Analysis of superconducting response and flux pinning ability of (Mg <sub>0.8</sub> Zn <sub>0.2</sub> Fe <sub>2</sub> O <sub>4</sub> ) <sub>x</sub> /CuTl-1223 composites. Materials Research Express, 2019, 6, 046002.	0.8	2
150	Enhanced Anharmonic Oscillations in Cu0.5Tl0.5Ba2(Ca2â^'yMgy)Cu3â^'xCdxO10â^'Î^ (y = 0, 1; x =Superconductors. Journal of Electronic Materials, 2020, 49, 2302-2309.	- 0, 1.	.5) 2
151	Sn doped (Cu0.5Tl0.5)Ba2Ca2Cu3â^'ySnyO10â^'δ superconductors: Effect on the diamagnetism and phonon modes. Journal of Applied Physics, 2009, 106, 083901.	1.1	1
152	AC Response of Cu0.5Tl0.5Ba2Ca2Cu3â^'x Sn x O10â^'Î^ Superconductor. Journal of Superconductivity and Novel Magnetism, 2010, 23, 325-328.	0.8	1
153	Superconducting Properties of Zn-Doped Cu0.5Tl0.5Ba2Ca2Cu3â^'y Zn y O10â^'δ Superconductors. Journal of Superconductivity and Novel Magnetism, 2010, 23, 351-359.	0.8	1
154	Suppression of Anti-ferromagnetism by K Doping in $\hat{A}$ (Cu0.5Tl0.5 $\hat{a}$ 'x K x )Ba2Ca2Cu3O10 $\hat{a}$ ' $\hat{l}$ ' Superconductors. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1341-1347.	0.8	1
155	Be-Doped Cu0.5Tl0.5Ba2Ca1(Cu0.5Zn1.5)O8â^'Î^ Superconductors. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1517-1523.	0.8	1
156	Thermally activated dissipation mechanism in Sn doped CuTl-1223 superconductors. Journal of Materials Science: Materials in Electronics, 2010, 21, 1308-1312.	1.1	1
157	Role of Mobile Charge Carriers and Fluctuation Induced Conductivity in (Cu0.5Tl0.5âˆa K x) Tj ETQq1 1 0.78431 1939-1945.	4 rgBT /O	verlock 10 Tf 1
158	Superconductivity and Fluctuation-Induced Conductivity (FIC) Analysis of (Cu0.5Tl0.5â^²x M x) Tj ETQq0 0 0 rgB	T /Qvgrloc	k 10 Tf 50 22
159	Comparison of the superconducting properties of Cu0.5Tl0.5Ba2Ca2(Cu3â^'yZny)O10â^'Î' prepared at different synthesis temperatures. Ceramics International, 2012, 38, 6417-6422.	2.3	1
160	Excess conductivity of Cu0.5Tl0.5Ba2Ca3Cu4â^'yZnyO12â^'δ superconductors. Low Temperature Physics, 2012, 38, 22-30.	0.2	1
161	Effect of Mg and Be Doping on Superconducting Properties of TlBa2(Ca2â^'y M y )Cu3O9â^'Î^ (y=0 and 1.5) Tj ET 1719-1724.	Qq1 1 0.7 0.8	784314 rgBT 1
162	Enhancement of superconductivity of TlBa2Ca3Cu4O12â^'Î' superconductors by Be doping. Journal of Physics: Conference Series, 2013, 439, 012022.	0.3	1

#	Article	IF	Citations
163	Mg-doped TlBa2(Ca2-xMgx)(Cu2.2Ti0.8)O10-Î′ (x = 0, 0.05, 0.15, 0.25, 0.35) superconductors. Journal o Applied Physics, 2013, 113, .	1.1	1
164	Fluctuation induced conductivity analysis of Mn doped Cu0.5Tl0.5Ba2Ca2Cu3â^'xMnxO10â^'δ (x = 0, 0.1 superconductors. Journal of Applied Physics, 2014, 116, .	.,0 <sub>1</sub> 15)	1
165	Synthesis and Excess Conductivity Analyses of Ce-Doped Tl1â^'x Ce x Ba2Ca2Cu3O10â^'Î^ Superconductors. Journal of Superconductivity and Novel Magnetism, 2014, 27, 2663-2671.	0.8	1
166	Synthesis and Paraconductivity Studies of Fe–Pd Nanoparticles Added Cu0.5Tl0.5Ba2Ca3Cu4 O 12â~δ Superconductors. Journal of Superconductivity and Novel Magnetism, 2015, 28, 2847-2854.	0.8	1
167	Charge Transfer Mechanism and Superconductivity in Tl0.5Cu0.5 (Ba1 $\hat{a}$ °x Sr x )Ca2Cu3O y (x = 0,) Tj ETQq1 1 0.7	/84314 rgE 0.8	3T /Overlack
168	Electron–Phonon Interactions and Superconductivity in (Cu0.5Tl0.5)Ba2Ca3(Cu4â^'y Ti y )O12â^'δ (y = 0,) Tj ET	Qq <mark>.0</mark> 0 0 rg	BT /Overloc
169	Effect of Charge Reservoir Layer on the Structural and Transport Properties of CuTlBa2â^'YSr Y -1223 (Y) Tj ETQq1	1.0.78431 0.8	.4 rgBT /Ove
170	Nb Substituted Cu0.5Tl0.5Ba2(Ca3Nb1)Cu5O \$\$_{14-delta}\$\$ and Cu0.5Tl0.5Ba2(Ca4Nb1)Cu6O \$\$_{16-delta}\$\$ Superconductors. Journal of Superconductivity and Novel Magnetism, 2007, 20, 321-331.	0.8	0
171	Fabrication of Micro-pipes of YBa2Cu3O7â^Î^Superconductor. Journal of Superconductivity and Novel Magnetism, 2009, 22, 693-697.	0.8	O
172	Superconductivity in (Cu0.5Tl0.25Li0.25)Ba2Ca2Cu3â^'ySiyO10â^'Î' samples. Solid State Sciences, 2010, 12, 1058-1062.	1.5	0
173	Excess-conductivity of (Bi0.5Tl0.5)Ba2Ca2Cu3O10-δ superconductors. Journal of Applied Physics, 2011, 109, .	1.1	О
174	Growth of (Cu0.5Tl0.5â^'x Hg x)Ba2Ca3Cu4O12â^'Î^ Superconductor with Optimal Carrier Density in CuO2 Planes and Fluctuation-Induced Conductivity. Journal of Superconductivity and Novel Magnetism, 2012, 25, 835-840.	0.8	0
175	Fluctuation Induced Conductivity in Hg-Doped (Cu0.5Tl0.5â^'x Hg x )Ba2Ca3 Cu 4O12â^'Î^ Superconductor. Journal of Superconductivity and Novel Magnetism, 2012, 25, 201-207.	0.8	О
176	Comparison of Superconductivity Parameters of (Cu1â^'x Tl x )Ba2Ca4Cu5O14â^Î Superconductor Synthesized at Different Temperatures. Journal of Superconductivity and Novel Magnetism, 2012, 25, 325-329.	0.8	0
177	Enhancement in the Superconductivity of Tl(Ba2â^'x Mg x )(Ca1Be1)Cu3O10â^'Î^ System with the Decreased Thickness of Charge Reservoir Layer. Journal of Superconductivity and Novel Magnetism, 2013, 26, 337-342.	0.8	О
178	Excess conductivity in Cu0.5Tl0.5Ba2(Ca2â^'yMgy)(Cu0.5Zn2.5)O10â^'δ superconductor. Ceramics International, 2013, 39, 7787-7792.	2.3	0
179	Superconductivity in Y-doped (Tl1-xYx)Ba2Ca2Cu3O10-l´. Scripta Materialia, 2013, 69, 517-520.	2.6	О
180	Excess Conductivity Analysis of Tl1â^'x Y x Ba2Ca2Cu3O10â^'Î^ Superconductors. Journal of Low Temperature Physics, 2013, 172, 70-83.	0.6	0

#	Article	IF	CITATIONS
181	Suppressed 3D conductivity in Mn doped Cu0.5Tl0.5Ba2Ca2â^'yMnyCu3O10â^'δ superconductors. Journal of Applied Physics, 2013, 113, 133904.	1.1	0
182	Inter-plane coupling and fluctuation induced conductivity analysis of Cu0.5Tl0.5Ba2Ca2â^'xYxCu3O10â^'Î' superconductors. Journal of Applied Physics, 2013, 114, 083908.	1.1	0
183	Excess conductivity analysis and infrared absorption spectroscopy of Mg-doped TlBa2Ca2Cu3O10-l'superconductor. Low Temperature Physics, 2014, 40, 199-205.	0.2	0
184	Synthesis and excess conductivity analysis of TlBa2(Ca3â^'y Be y )Cu4O12â^'δ superconductors. Applied Physics A: Materials Science and Processing, 2014, 116, 1307-1313.	1.1	0
185	Synthesis and Para-conductivity Analyses of TlBa2(Ca 3 $\hat{a}$ ° y Mg y )Cu4 O 1 2 $\hat{a}$ ° $\hat{l}$ ° Superconductors. Journal of Superconductivity and Novel Magnetism, 2014, 27, 2005-2010.	0.8	0
186	Significance of Phonon Modes and Excess Conductivity of (Cu0.5Tl0.5)Ba2Ca3(Cu4 $\hat{a}$ °'x Ti x )O12 $\hat{a}$ °' $\hat{l}$ ° (x = 0,) Tj ET 2009-2015.	Qq0 0 0 rg 0.8	gBT /Overloc 0
187	Investigation on Critical Regime of Cu0.5Tl0.5Ba2(Ca2â^'x Be x )(Cu2Ti)O10â^'Î^ Superconductor via Excess Conductivity Analysis. Journal of Superconductivity and Novel Magnetism, 2015, 28, 3243-3248.	0.8	0
188	Influence of Ti doping on the superconducting properties of YBa2(Cu3â^'xTix)O7â^'Î' materials. Journal of Materials Science: Materials in Electronics, 2016, 27, 12178-12184.	1.1	0
189	Decoupling of the CuO2 plane and superconductivity in Cu0.5Tl0.5Ba2(Ca2â^'ySry)Cu3O10â^'Î'(y = 0â€"0.4) samples. International Journal of Modern Physics B, 2016, 30, 1650097.	1.0	0
190	Effect of CuO2 planes on the structural and superconducting transport properties of [CuTl â^' 12(n â^') Tj ETQq0 (	0 rgBT /C 1.0	Overlock 10
191	Synthesis and Para-conductivity of (Tl $\$ _{1-x}\$\$ 1 - x Ti \$\$_{x}\$\$ x)Ba \$\$_{2}\$\$ 2 Ca \$\$_{2}\$\$ 2 Cu \$\$_{3}\$\$ 3 O \$\$_mathrm{y}\$\$ y (x \$\$=\$\$ = 0, 0.2, 0.4, 0.6, 0.8) Superconductors. Journal of Low Temperature Physics, 2016, 182, 38-50.	0.6	О
192	Influence of Be substitution on the superconducting properties of (Cu0.5Tl0.5)Ba2(Ca2â^'yBey)(Cu2.5Cd0.5)O10â^'Î' (yÂ=Â0, 0.1, 0.2, 0.35, 0.5) samples. Journal of Materials Scien Materials in Electronics, 2017, 28, 3509-3514.	IC <b>P.1</b>	0
193	Ni Nanoparticle-Added Ni x /(Cu 0 . 5 Tl 0 . 5 )Ba2Ca2Cu3 O 10-δSuperconductor Composites and Their Enhanced Flux Pinning Characteristics. Journal of Superconductivity and Novel Magnetism, 2018, 31, 1013-1020.	0.8	О
194	Enhanced superconducting properties of Ti doped (Cu0.5Tl0.5)Ba2(Ca2â^'xTix)Cu3O10â^'δ samples. Journal of Materials Science: Materials in Electronics, 2018, 29, 12414-12418.	1.1	0
195	Dopants Effect on Dielectric Response of (CuTl)0.5Ba2(CaMg)Cu3â^'xAxO10â^'Î^ Superconducting Phase. Journal of Low Temperature Physics, 2020, 198, 145-157.	0.6	o

Infield magnetic measurements of (Cu<sub>0.5</sub>Tl<sub>0.5</sub>Ba<sub>2</sub>Ca<sub>3</sub>(Cu<sub>4â^'<i>x</i></sub>Ti<sub>x</sub>2)O<sub>12â^'Î</sub>(ci>x</i></sub=2)O<sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</sub>12â^'Î</