Tilo Zienert

List of Publications by Year
in descending order

38 papers	539 citations	686830 13 h-index	676716 22 g-index
40 all docs	40 docs citations	40 times ranked	427 citing authors

#	Article	IF	Citations
1	Effect of MgO Grade in MgOâ€“C Refractories on the Nonâ€metallic Inclusion Population in Alâ€Treated Steel. Steel Research International, 2022, 93, .	1.0	6
2	Highâ€Temperature Compressive Behavior of Refractory Aluminaâ€“Niobium Composite Material. Advanced Engineering Materials, 2022, 24, .	1.6	8
3	Coarseâ€Grained Refractory Composite Castables Based on Alumina and Niobium. Advanced Engineering Materials, 2022, 24, .	1.6	7
4	Characterization of Sintered Niobiumâ€“Alumina Refractory Composite Granules Synthesized by Castable Technology. Advanced Engineering Materials, 2022, 24, .	1.6	2
5	A New Approach for Sintering Simulation of Irregularly Shaped Powder Particlesâ€"Part II: Statistical Powder Modeling. Advanced Engineering Materials, 2022, 24, .	1.6	2
6	Full and Hollow Metalâ€“Ceramic Beads Based on Tantalum and Alumina Produced by Alginate Gelation. Advanced Engineering Materials, 2022, 24, .	1.6	3
7	Low Shrinkage, Coarseâ€Grained Tantalumâ€“Alumina Refractory Composites via Cold Isostatic Pressing. Advanced Engineering Materials, 2022, 24, .	1.6	2
8	MÃ¶ssbauer spectroscopic and XRD studies of two Î·-Fe2Al5 intermetallics. Intermetallics, 2021, 135, 107217.	1.8	2
9	Metal-Ceramic Beads Based on Niobium and Alumina Produced by Alginate Gelation. Materials, 2021, 14, 5483.	1.3	4
10	Synthesis of Niobium-Alumina Composite Aggregates and Their Application in Coarse-Grained Refractory Ceramic-Metal Castables. Materials, 2021, 14, 6453.	1.3	11
11	Characterization of the In Situâ€Formed Oxide Layer at the Steel Melt/Carbonâ€Bonded Alumina Interface. Advanced Engineering Materials, 2020, 22, 1900811.	1.6	5
12	Corrosion-Resistant Steelâ€“MgO Composites as Refractory Materials for Molten Aluminum Alloys. Materials, 2020, 13, 4737.	1.3	8
13	Aluminum Melt Filtration with Carbon Bonded Alumina Filters. Materials, 2020, 13, 3962.	1.3	10
14	Prediction of heat capacity for crystalline substances. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 65, 177-193.	0.7	6
15	cp-tools: A Python library for predicting heat capacity of crystalline substances. SoftwareX, 2019, 9, 244-247.	1.2	2
16	Influence of the Wetting Behavior on the Aluminum Melt Filtration. Minerals, Metals and Materials Series, 2019, , 1071-1079.	0.3	1
17	Mechanical High-Temperature Properties and Damage Behavior of Coarse-Grained Alumina Refractory Metal Composites. Materials, 2019, 12, 3927.	1.3	13
18	Wettability of AlSi7Mg alloy on alumina, spinel, mullite and rutile and its influence on the aluminum melt filtration efficiency. Materials and Design, 2018, 150, 75-85.	3.3	27

#	ARTICLE	IF	CITATIONS
19	Experimental investigation and thermodynamic assessment of the Al-Fe system. Journal of Alloys and Compounds, 2018, 743, 795-811.	2.8	40
20	Interface reactions of differently coated carbon-bonded alumina filters with an AZ91 magnesium alloy melt. Ceramics International, 2018, 44, 17415-17424.	2.3	6
21	Coarse-grained refractory composites based on Nb-Al2O3 and Ta-Al2O3 castables. Ceramics International, 2018, 44, 16809-16818.	2.3	19
22	Thermodynamics of the Mgâ€Mnâ€O systemâ€”modeling and heat capacity measurements. Journal of the American Ceramic Society, 2017, 100, 1661-1672.	1.9	13
23	Filtration Efficiency of Functionalized Ceramic Foam Filters for Aluminum Melt Filtration. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 497-505.	1.0	37
24	Thermally Induced Formation of Transition Aluminas from Boehmite. Advanced Engineering Materials, 2017, 19, 1700141.	1.6	19
25	Formation of different alumina phases and magnesium aluminate spinel during contact of molten AlSi7Mg0.6 alloy with mullite and amorphous silica. Corrosion Science, 2017, 114, 79-87.	3.0	5
26	Heat capacity of Fe-Al intermetallics: B2-FeAl, FeAl2, Fe2Al5 and Fe4Al13. Journal of Alloys and Compounds, 2017, 725, 848-859.	2.8	33
27	Heat capacity of Î·-AlFe (Fe2Al5). Intermetallics, 2016, 77, 14-22.	1.8	20
28	Experimental investigation of phase relations and thermodynamic properties in the system ZrO 2 â€“Eu 2 O 3 â€“Al 2 O 3. Journal of the European Ceramic Society, 2016, 36, 1455-1468.	2.8	4
29	Calculated phase diagrams and thermodynamic properties of the Al 2 O 3 â€“Fe 2 O 3 â€“FeO system. Journal of Alloys and Compounds, 2016, 657, 192-214.	2.8	32
30	Interface reactions between steel 42CrMo4 and mullite. Journal of the European Ceramic Society, 2015, 35, 1317-1326.	2.8	4
31	Interface reactions between liquid iron and aluminaâ€“carbon refractory filter materials. Ceramics International, 2015, 41, 2089-2098.	2.3	46
32	Reticulated Porous Foam Ceramics with Different Surface Chemistries. Journal of the American Ceramic Society, 2014, 97, 2046-2053.	1.9	39
33	Thermodynamic investigation of the -Alâ€“Feâ€“Si intermetallic ternary phase: A density-functional theory study. Journal of Alloys and Compounds, 2014, 598, 137-141.	2.8	15
34	Comparison of Interfacial Reactions Between Al<scp>S</scp>i7<scp>M</scp>g and Alumina Filter After Casting and Spark Plasma Sintering**. Advanced Engineering Materials, 2013, 15, 1206-1215.	1.6	6
35	Thermodynamic assessment and experiments in the system MgOâ€“Al2O3. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2013, 40, 1-9.	0.7	44
36	<scp>P</scp>hase Relations in the A356 Alloy: Experimental Study and Thermodynamic Calculations. Advanced Engineering Materials, 2013, 15, 1244-1250.	1.6	13

#	Article	IF	Citations
37	Phase relations in the ZrO₂-Sm₂O₃-Y₂O₃-Al₂O₃ system: experimental investigation and thermodynamic modelling. International Journal of Materials Research, 2012, 103, 1469-1487.	0.1	18
38	Atomic Force Microscopy Investigation of the In Situâ€Formed Oxide Layer at the Interface of Al 2 O 3 âˆ’C/Steel Melt in Terms of Adhesion Force and Roughness in a Model System. Advanced Engineering Materials, 0, , 2100634.	1.6	0