

Wykaz publikacji naukowych Instytutu Metalurgii i Inżynierii Materiałowej PAN za rok 2019

L.p	Tytuł czasopisma	L.p	Tytuł publikacji	Autor (autorzy)	Rok, tom, str. (od-do)	Autor (autorzy) IMIM PAN
<p>Wg. WYKAZU czasopism naukowych i recenzowanych materiałów z konferencji międzynarodowych (Załącznik do komunikatu Ministra Nauki i Szkolnictwa Wyższego z dnia 31 lipca 2019 r.)</p> <p style="text-align: center;">1. Publikacje w czasopismach zamieszczone w wykazie czasopism</p>						
1.	Acta Materialia	1.1	On distances between grain interfaces in macroscopic parameter space	A. Morawiec	2019, 181, 399–407	A. Morawiec
		1.2	Determining grain boundary energies from triple junction geometrie without discretizing the five-parameter space	Y.F. Shen, X. Zhong, H. Liu, R.M. Suter, A. Morawiec, G.S. Rohrer	2019, 166, 126–134	A. Morawiec
2.	Acta Metallurgica Slovaca	2.1	Diffusive and displacive phase transformations under high pressure torsion	B. Straumal, A. Kilmametov, A. Mazilkin, O. Kogtenkova, B. Baretzky,	2019, 2, 5 230-252	A. Korneva, P. Zięba
3.	Analytical Chemistry	3.1	Biophysical and Biochemical Characteristics as Complementary Indicators of Melanoma Progression	J. Bobrowska, K. Awsiuk, J. Pabijan, P. Bobrowski, J. Lekki, K. M. Sowa, J. Rysz, A. Budkowski, M. Lekka	2019, 91, 9885-9892	P. Bobrowski

4.	Applied Magnetic Resonance	4.1	Magnetic Phase Transition and Exchange Bias in Ni ₄₅ Co ₅ Mn _{35.5} In _{14.5} Heusler Alloy	Ł. Dubiel, A. Żywczak, W. Maziarz, I. Stefaniuk, A. Wal	2019, 50, 809-818	W. Maziarz
5.	Applied Nanoscience	5.1	Nano-size defects in arsenic-implanted HgCdTe flms: a HRTEM study	O. Bonchych, H. Savytsky, Z. Świątek, J. Morgiel, A. Voitsekhovskii, A. Korotaev, K. Mynbaev, O. Fitsych, V. Varavin, S. Dvoretzky, D. Marin V. Yakushev	2019, 9, 725–730	Z. Świątek, J. Morgiel
6.	Archives of Civil and Mechanical Engineering	6.1	Microstructure and wear of thermal sprayed composite NiAl-based coatings	O. Poliarus, J. Morgiel, O. Umanskyi, M. Pomordska, P. Bobrowski, M.J. Szczerba, O. Kostenko	2019, 19, 1095-1103	J. Morgiel, M. Pomorska, P. Bobrowski, M.J. Szczerba
7.	Archives of Metallurgy and Materials	7.1	Diffusive and Displacive Phase Transformations in Nanocomposites under High Pressure Torsion.	B. Straumal, A. Kilmametov, A. Gornakova, A. Mazilkin, B. Baretzky, A. Korneva, P. Zięba	2019, 64, 457–465	A. Korneva, P. Zięba
		7.2	Effect of different organic additives on surface morphology and microstructure of Zn-Mo coatings electrodeposited from citrate baths	A. Hara, H. Kazimierczak, A. Bigos, Z. Świątek, P. Ozga	2019, 64, 1, 207-220	H. Kazimierczak, A. Bigos, Z. Świątek, P. Ozga

		7.3	Effect of powder grain size and titania content on mechanical and tribological properties of plasma sprayed Al ₂ O ₃ -TiO ₂ ceramic coatings	A. Góral, W. Żórawski	2019, 64, 45-53	A. Góral
		7.4	Diffusive and Displacive Phase Transformations in Nanocomposites under High Pressure Torsion.	B. Straumal, A. Kilmametov, A. Gornakova, A. Mazilkin, B. Baretzky, A. Korneva, P. Zięba	2019, 64, 457–465	A. Korneva, P. Zięba
		7.5	Microstructural and chemical composition changes in the bonding zone of explosively welded sheets	H. Paul, M.M. Miszczyk, A. Gałka, R. Chulist, Z. Szulc	2019, 64, 683-694	H. Paul, M. M. Miszczyk, R. Chulist
		7.6	The Evolution of Microstructure and Magneto-structural Properties of Heat Treated Ni-Mn-Sn-In Heusler Alloys Sintered by Vacuum Hot Pressing	W. Maziarz, A. Wójcik, R. Chulist, M. Szczerba, M. Kowalczyk, P. Czaja, E. Cesari, J. Dutkiewicz	2019, 64, 727-732	W. Maziarz, A. Wójcik, R. Chulist M. Szczerba, P. Czaja, J. Dutkiewicz
		7.7	The kinetic of Al ₃ Ti phase growth in explosively welded multilayered Al/Ti clads during annealing under load conditions	P. Petrzak, I. Mania, H. Paul, Ł. Maj, A. Gałka	2019, 64, 4 1549-1554	P. Petrzak, I. Mania, H. Paul, Ł. Maj
8.	Catalysis Today	8.1	VOCs combustion catalysts based on composites of exfoliated organoLaponite and multimetallic (Mn, Al, Zr, Ce)	B.D. Napruszewska, A. Michalik-Zym, R. Dula, D. Duraczyńska,	2019, 333, 182–189	L. Lityńska- Dobrzyńska

			hydrotalcites prepared by inverse microemulsion	W. Rojek, R.P. Socha, L. Lityńska-Dobrzyńska, K. Bahranowski, E.M. Serwicka		
9.	Coatings	9.1	The Effect of Direct and Pulsed Current in the Presence of Surfactants on the Electrodeposition of Zn–SiC Nanocomposite Coatings	H. Kazimierzczak, K. Szymkiewicz, E. Gileadi, N. Eliaz	2019, 9, 93	H. Kazimierzczak, K. Szymkiewicz
10.	Composites: Theory and Practice	10.1	Effect of Milling Time on Morphology and Size of Copper /CNT Composite Powder	J. Grzegorek, Ł. Maj, W. Maziarz	2018,18, 4, 227-233	J. Grzegorek, Ł. Maj, W. Maziarz
11.	Electrochimica Acta	11.1	Ba _{0.95} Ca _{0.05} Ce _{0.9} Y _{0.1} O ₃ as an electrolyte for proton conducting fuel cell	M. Dudek, B. Lis, R. Lach, S. Daugela, T. Salkus, A. Kezjonis, M. Mosiałek, R. Socha, J. Morgiel, M. Gajek, M. Sitarz M. Ziabka	2019, 304 70-79	J. Morgiel
		11.2	Electroless deposition of Ni–P and Ni–P–Re alloys from acidic hypophosphite baths	H. Kazimierzczak, A. Wierzbicka-Miernik, I. Kwiecień, M. J. Szczerba, A. Korneva, M. Mosiałek, K. Miernik, J. Wojewoda-Budka	2019, 303, 157-166	H. Kazimierzczak, A. Wierzbicka-Miernik, I. Kwiecień, M. J. Szczerba, A. Korneva, J. Wojewoda-Budka
12.	Infrared Physics & Technology	12.1	Arsenic –ion implantation induced defects in HgCdTe films studied with Hall effect measurements and mobility spectrum analysis	I. Izhnin, K. Mynbaev A. Voitsekhovskiy, A. Korotaev, I. Syvorotka, O. Fitsych, V. Varavin S. Dvoretzky,	2019, 98, 230-235	Z. Świątek, J. Morgiel

				N. Mikhailov, V. Remesnik, M. Yakushev, Z.Świątek, J. Morgiel, O. Bonchuk, H. Savytsky		
13.	Intermetallics	13.1	Composition dependence of martensitic transformation and crystal structure in Ni ₅₀ Mn ₂₅ Ga _{25-x} Cu _x Heusler alloys	A. Brzoza, A. Wierzbicka-Miernik, T. Czeppe, E. Cesari, M.J. Szczerba	2019, 109, 157-161	A. Brzoza , A. Wierzbicka- Miernik, T. Czeppe, M.J. Szczerba
		13.2	Formation of Magnesium Silicide in bulk diffusion couples	A. Kodentsov, A. Wierzbicka-Miernik, L. Lityńska-Dobrzyńska, P. Czaja, J. Wojewoda- Budka	2019, 114, 106589	A. Wierzbicka-Miernik, L. Lityńska- Dobrzyńska, P. Czaja, J. Wojewoda-Budka
14.	International Journal of Hydrogen Energy	14.1	Ternary LaNi _{4.75} M _{0.25} hydrogen storage alloys: surface segregation, hydrogen sorption and thermodynamic stability	Z. Łodziana, A. Dębski, G. Cios, A. Budziak	2019, 44, 1760-1773	A. Dębski
15.	International Journal of Materials Research	15.1	Effect of powder morphology on the microstructure and properties of cold sprayed Ni coatings	A. Góral, W. Żórawski, P. Czaja, L. Lityńska-Dobrzyńska, M. Makrenek, S. Kowalski	2019, 110, 49-59	A. Góral, P. Czaja, L. Lityńska- Dobrzyńska
		15.2	Effect of heat treatment on the precipitation hardening in FeNiCoAlTaB shape memory alloys	R. Chulist, M. Prokopowicz, W. Maziarz, P. Ostachowski N. Schell	2019, 110, 1, 70-74	R. Chulist, W. Maziarz,
		15.3	Microstructure and properties	J. Kusiński, O. Czyż,	2019, 110, 11-17	J. Morgiel

			of laser interference crystallized amorphous FeSiB ribbon	A. Radziszewska, J. Morgiel, C. Kapusta, R. Ostrowski, M. Strzelec, K. Czyż		
		15.4	Microstructure of Ti/Al multilayer foils ignited with electric current	Ł. Maj, J. Morgiel, M. Szlezynger	2019, 110, 60-65	Ł. Maj, J. Morgiel, M. Szlezynger
		15.5	Phase transitions in copper-silver alloys under high pressure torsion	B. B. Straumal, A. R. Kilmametov, O. A. Kogtenkova, A. A. Mazilkin, B. Baretzky, A. Korneva, P. Zięba	2019, 110, 608-613	A. Korneva, P. Zięba
		15.6	Structure of MgLiAl alloys after various routes of severe plastic deformation studied by TEM	J. Dutkiewicz, S. Rusz, O. Hilsner, T. A. Tański, W. Borek, M. Szlezynger, P. Bobrowski, W. Maziarz	2019, 110, 1, 24-31	J. Dutkiewicz, M. Szlezynger, P. Bobrowski, W. Maziarz
16.	International Journal of Plasticity	16.1	Orthogonal shear process in Ni-Mn-Sn single crystal	R. Chulist, P. Czaja, T. Tokarski, I. Kuksgauzen, Y.I. Chumlyakov	2019, 114, 63-71	R. Chulist, P. Czaja
17.	JETP Letters	17.1	Phase Transformations in Copper-Tin Solid Solutions at High-Pressure Torsion	B. Straumal, A. Kilmametov, I. Mazilkin, A. Korneva, P. Zięba, B. Baretzky	2019, 110, 9, 624-628	A. Korneva, P. Zięba
18.	Journal of Alloys and Compounds	18.1	Development of new age hardenable Mg-Li-Sc alloys	J. Dutkiewicz, Ł. Rogal, D. Kalita, P. Fima	2019, 784, 686-696	J. Dutkiewicz, Ł. Rogal, D. Kalita, P. Fima

		18.2	Demystifying the sluggish diffusion effect in high entropy alloys	J. Dąbrowa, M. Zalusz, W. Kucza, G. Cieślak, K. Berent, T. Czeppe, T. Kulik, M. Danielewski	2019, 783, 193-207	T. Czeppe
		18.3	Microstructural anisotropy, phase composition and magnetic properties of as-cast and annealed Ni-Mn-Ga-Co-Cu melt-spun ribbons	A. Brzoza, M. Kowalczyk, A. Wierzbicka-Miernik, P. Czaja, W. Maziarz, A. Wójcik, J. Wojewoda-Budka, M. Sikora, J. Dutkiewicz, M.J. Szczerba	2019, 776, 319-325	A. Brzoza, A. Wierzbicka-Miernik, P. Czaja, W. Maziarz, A. Wójcik, J. Wojewoda-Budka, J. Dutkiewicz, M.J. Szczerba
		18.4	Microstructural response on nickel addition in rapidly solidified ~ Fe-25Cr-xNi-5Mo-0.8 C [x= 0, 6, 11, 15, 21 wt.%] hardfacing alloys	K. Wiczerzak, K. Pajor, K. Górecki, R. Chulist, P. Bała	2019, 787, 186-195	R. Chulist
		18.5	Towards micro- and nanostructured AlZnCu alloys cast from commercial-purity alloys	P. L. Krajewski, Ł. Rogal, M. Faryna, A.L. Greer, W.K. Krajewski	2019, 801, 229-233	Ł. Rogal, M. Faryna
19.	Journal of Applied Physics	19.1	Temperature dependance of twinning stress in Ni _{49.5} Mn _{38.4} Sn _{12.2} single crystal	P. Czaja, R. Chulist, T. Tokarski, Y. I. Chumlyakov, W. Maziarz	2019, 126, 145107	P. Czaja, R. Chulist, W. Maziarz
20.	Journal of Chemical and Engineering Data	20.1	Liquid Metals in High-Temperature Cooling Systems: The Effect of Bi Additions for the Physicochemical Properties of Eutectic Ga-Sn-Zn	A. Dobosz, Yu. Plevachuk, V. Sklyarchuk, B. Sokoliuk, O. Tkach, T. Gancarz	2019, 271, 942-948	A. Dobosz, T. Gancarz

21.	Journal of Chemical Thermodynamics	21.1	Thermodynamics of liquid Li-Sb alloys - experiment vs modeling	M.E. Trybula, S. Terlicka, P. Fima	2019, 128, 134-140	M.E. Trybula, S. Terlicka, P. Fima
22.	Journal of Electronic Materials	22.1	Interfacial Phenomena between Liquid Ga-Based Alloys and Ni Substrate	T. Gancarz, K. Berent, N. Schell, R. Chulist	2019,48, 5941–5947	T. Gancarz, R. Chulist
23.	Journal of Machine Engineering	23.1	Experimental investigations of the bonding zone in the explosive welding of a differently structured steel-zirconium platers	M. Prażmowski, H. Paul,	2019, 19, 2, 99–110	H. Paul
24.	Journal of Magnetism and Magnetic Materials	24.1	On the magnetic contribution to the inverse magnetocaloric effect in Ni-Co-Cu-Mn-Sn metamagnetic shape memory alloys	P. Czaja, M. Kowalczyk, W. Maziarz	2019, 474, 381–392	P. Czaja, W. Maziarz
		24.2	Magnetic and structural phase transition in Ni ₅₀ Mn _{35.5} In _{14.5} ribbon	Ł. Dubiel, I. Stefaniuk, A. Wal, A. Żywczak, A. Dziedzic, W. Maziarz	2019, 485, 21–26	W. Maziarz
		24.3	Perforated alumina templates as a tool for engineering of CoPd film magnetic properties	A. Maximenko, M. Marszałek, J. Chojenka, J. Fedotova, B. Jany, F. Krok, J. Morgiel, A. Zarzycki, Y. Zabala	2019, 477, 182–189	J. Morgiel
25.	Journal of Materials Engineering and Performance	25.1	Microstructure and Mechanical Properties of Ti-Nb Alloys Prepared by Mechanical Alloying and Spark Plasma Sintering	D. Kalita, Ł. Rogal, T. Czeppe, A. Wójcik, A. Kolano-Burian, P. Zackiewicz, B. Kania, J. Dutkiewicz	2019, 1-8	D. Kalita, Ł. Rogal, T. Czeppe, A. Wójcik, B. Kania, J. Dutkiewicz

		25.2	Oxidation Resistance of Ti-Al-Cr-Nb-Based High-Entropy Alloys in Air at 1073 K	R. Gawel, Ł. Rogal, K. Przybylski	2019, 28, 7, 4163–4170	Ł. Rogal
26.	Journal of Materials Processing Technology	26.1	Semi-solid state mixing of Mg-Zn-RE alloys—microstructure and mechanical properties	Ł. Rogal, G. Garzeł	2019, 264, 352-365	Ł. Rogal
27.	Journal of Materials Research and Technology	27.1	Microstructure and mechanical properties of Mg–Zn–RE–Zr alloy after thixoforming	Ł. Rogal, A. Kania, K. Berent, K. Janus, L. Lityńska-Dobrzyńska	2019, 8, 1, 1121-1131	Ł. Rogal, L. Lityńska-Dobrzyńska
28.	Journal of Materials Science	28.1	Microstructural origins of martensite stabilization in Ni ₄₉ Co ₁ Mn _{37.5} Sn _{6.5} In ₆ metamagnetic shape memory alloy	P. Czaja, J. Przewoźnik, M. Kowalczyk, A. Wierzbicka- Miernik, J. Morgiel, W. Maziarz	2019, 54, 4340–4353	P. Czaja, A. Wierzbicka- Miernik, J. Morgiel, W. Maziarz
29.	Journal of Molecular Liquids	29.1	Liquid metals in cooling systems: Experimental design of thermophysical properties of eutectic Ga-Sn-Zn alloy with Pb additions	A. Dobosz, Yu. Plevachuk, V. Sklyarchuk, B. Sokoliuk, O. Tkach, T. Gancarz	2019, 281, 542-548	A. Dobosz, T. Gancarz
30.	Journal of Molecular Structure	30.1	Fluorescent triazolyl spirooxazolidines: Synthesis and NMR stereochemical studies	P. Kasza, M. E. Trybuła, K. Baradziej, M. Kępczyński, P.W. Szafranski, M. T. Cegła	2019, 1183, 157-167	M. E. Trybuła

31.	Journal of Materials Science: Materials in Electronics	31.1	The effect of post-process annealing on optical and electrical properties of mixed HfO ₂ -TiO ₂ thin film coatings	A. Obstarczyk, D. Kaczmarek, M. Mazur, D. Wojcieszak, J. Domaradzki, T. Kotwica, J. Morgiel	2019, 30, 6358–6369	J. Morgiel
		31.2	The influence of Li on the thermophysical properties of liquid Ga-Sn-Zn eutectic alloys	A. Dobosz, Y. Plevachuk, V. Sklyarchuk, B. Sokoliuk, T. Gancarz	2019, 30, 18970–18980	T. Gancarz
32.	Journal of Natural Gas Science and Engineering	32.1	CO ₂ and CH ₄ sorption on carbon nanomaterials and coals – Comparative characteristics	A. Pajdak, N. Skoczylas, A. Dębski, J. Grzegorek, W. Maziarz, M. Kudasik	2019, 72, 103003	A. Dębski, J. Grzegorek, W. Maziarz
33.	Journal of Physical Chemistry C	33.1	A Precursor Approach for the Development of Lace-Like Fe ₂ O ₃ Nanocrystallites Triggered by Pressure Dependent Nucleation and Growth of Akaganeite over Clay Based Composites for Toluene Combustion	M. Zimowska, J. Gurgul, E. Scholtzova, H. Pálková, L. Litynska-Dobrzynska, R.P. Socha, Ł. Mokrzycki, K. Łątka	2019, 123, 43, 26236-26250	L. Lityńska-Dobrzyńska
		33.2	Atomistic Simulations of Al(100) and Al(111) Surface Oxidation: Chemical and Topological Aspects of the Oxide Structure	M. E. Trybuła, P.A. Korzhavyi	2019, 123, 1, 334-346	M. E. Trybuła
34.	Journal of Thermal Spray Technology	34.1	Effect of Powder Preparation on the Microstructure and Wear of Plasma-Sprayed NiAl/CrB ₂ Composite Coatings	O. Poliarus, J. Morgiel, P. Bobrowski, M. Szlezynger, O. Umanskyi, M. Ukrainets,	2019, 28, 1039–1048	J. Morgiel, P. Bobrowski, M. Szlezynger, Ł. Maj

				Ł. Maj, O. Kostenko		
35.	Kovove Materialy	35.1	Cr cluster characterization in Cu-Cr-Zr alloy after ECAP processing and aging using SANS and HAADF-STEM	K. Abib, H. Azzeddine, B. Alili, L. Lityńska-Dobrzyńska, A.L. Helbert, T. Baudin, P. Jegou, M.H. Mathon, P. Zięba, D. Bradai	2019, 57, 121–129	L. Lityńska-Dobrzyńska, P. Zięba
36.	Materials-Open Access	36.1	Correlation of different electrical parameters of solar cells with silver front electrodes	M. Musztyfaga-Staszuk, D. Janicki, P. Panek	2019, 12, 1 - 12	P. Panek
		36.2	Structural and mechanical properties of Ti–Co alloys treated by high pressure torsion	B. B. Straumal, A. Korneva, A. R. Kilmametov, L. Lityńska-Dobrzyńska, A. S. Gornakova, R. Chulist, M. I. Karpov, P. Zięba	2019, 12, 426-437	A. Korneva, L. Lityńska-Dobrzyńska, R. Chulist, P. Zięba
		36.3	Dissolution of Ag precipitates in the Cu–8wt.%Ag alloy deformed by high pressure torsion	A. Korneva, B. Straumal, A. Kilmametov, R. Chulist, G. Cios, B. Baretzky, P. Zięba	2019, 12, 447-459	A. Korneva, R. Chulist, P. Zięba
		36.4	Microstructure Evolution and Some Properties of Hard Magnetic FeCr30Co8 Alloy Subjected to Torsion Combined with Tension	A. Korneva, G. Korznikova, R. Kashaev, B. Straumal	2019, 12, 3019-3029 31540357	A. Korneva

		36.5	Microstructure of coatings on nickel and steel platelets obtained by comilling with NiAl and CrB2 powders	M. Szlezynger, J. Morgiel, Ł. Maj, O. Poliarus, P. Czaja	2019, 12, 2593	M. Szlezynger, J. Morgiel, Ł. Maj, P. Czaja
37.	Materials and Corrosion	37.1	Influence of regulated modification of nitride layer by oxygen on the electro-chemical behavior of Ti6Al4V alloy in the Ringer's solution	I. Pohrelyuk, O. Tkachuk, R. Proskurnyak, J. Guspiel, E. Beltowska Lehman, J. Morgiel	2019, 2320-2325	J. Guspiel, E. Beltowska - Lehman, J. Morgiel
38.	Materials & Design	38.1	Branching of {110} twin boundaries in five-layered Ni-Mn-Ga bent single crystals	R. Chulist, L. Straka, H. Seiner, A. Sozinov, N. Schell, T. Tokarski	2019, 171, 107703	R. Chulist
39.	Materials Characterization	39.1	Combined in situ and EBSD studies of discontinuous precipitation in Al-22 at.%Zn alloy	P. Zięba, M. Faryna, M. Chronowski	2019, 157 109889	P. Zięba, M. Faryna
		39.2	In-situ investigation of phase transformations during heating of AlCoCrCuNi high entropy melt-spun ribbons	Ł. Rogal, J. Morgiel, F. Stein, B. Breitbach, J. Dutkiewicz	2019, 148, 134-141	Ł. Rogal, J. Morgiel, J. Dutkiewicz
		39.3	SHS reaction of Ti/Al multi-layers and resistive heating used for joining of Ti6Al4V alloy	Ł. Maj, J. Morgiel, K. Mars, G. Cios, A. Tarasek, E. Godlewska	2019, 154, 31-39	Ł. Maj, J. Morgiel, A. Tarasek,
40.	Materials Chemistry and Physics	40.1	Microstructure evolution and magnetic properties in Mn-rich Ni-(Co, Cu, Fe)-Mn-Sn Heusler base shape memory alloys	P. Czaja, R. Chulist, A. Wierzbicka- Miernik, A. Brzoza, M. Fitta, W. Maziarz	2019, 235, 121720	P. Czaja, R. Chulist, A. Wierzbicka- Miernik, A. Brzoza, W. Maziarz

		40.2	The periodic layer formation in early stage reaction of silicon dioxide with magnesium	J. Wojewoda-Budka, A. Wierzbicka-Miernik, L. Lityńska-Dobrzyńska, A. Korneva, B. Onderka, A. Kodentsov	2019, 231, 260-263	J. Wojewoda-Budka, A. Wierzbicka-Miernik, L. Lityńska-Dobrzyńska, A. Korneva
41.	Materials Letters	41.1	Misorientation characteristics of interphase boundary in <i>Pinctada margaritifera</i> shell	M. Strąg, M. Bieda, Ł. Maj, A. Jarzębska, K. Berent, K. Nalepka, A.G. Checa, K. Sztwiertnia	2019, 253, 302-305	M. Strąg, M. Bieda, Ł. Maj, A. Jarzębska, K. Sztwiertnia
42.	Materials Research Express	42.1	Simulation of TiO ₂ /CuO solar cells with SCAPS-1D software	P. Sawicka-Chudy, Z. Starowicz, G. Wisz, R. Yavorskyi, Z. Zapukhlyak, M. Bester, Ł. Głowa, M. Sibiński, M. Cholewa	2019, 6, 085918	Z. Starowicz
		42.2	The Ge enhanced exchange bias effect in Ni ₅₀ Mn _{37.5} Sn _{12.5} metamagnetic shape memory alloys	P. Czaja, J. Przewoźnik, C. Kapusta, W. Maziarz	2019, 6, 106111	P. Czaja, W. Maziarz
43.	Materials Science	43.1	Electrochemical Behavior of Ti-6Al-4V Alloy in Ringer's Solution After Oxynitriding	O. V. Tkachuk, I.M. Pohrelyuk, R.V. Proskurnyak, J. Guspiel, E. Beltowska-Lehman, J. Morgiel	2019, 54, 4, 542-546	J. Guspiel, E. Beltowska-Lehman, J. Morgiel
		43.2	Influence of the parameters of plasma-electrolytic oxidation on the formation of calcium-phosphate coatings on titanium	I. M. Pohrelyuk, R. V. Proskurnyak, O. V. Tkachuk, A. Góral	2019, 54, 789-795	A. Góral

44.	Materials Science & Engineering A	44.1	Thermomechanical behavior of amorphous alloys based on titanium at the temperature range of the glass transition and crystallization	A. Sypień, G. Garzeł, T. Czeppe	2019, 743, 77-86	A. Sypień, G. Garzeł, T. Czeppe
		44.2	Twin-induced stability and mechanical properties of pure magnesium	B. Sułkowski, R. Chulist	2019, 749, 89-95	R. Chulist
45.	Materials Science and Engineering: B	45.1	The effect of vacuum suction casting on the microstructure and corrosion behavior of aluminium alloy 2017	Z. Szklarz, H. Krawiec, Ł. Rogal	2019, 240, 23-32	Ł. Rogal
46.	Materials Science and Technology	46.1	Effect of in-situ formed MgO on the microstructure of thixomolded AZ91 magnesium alloy	L. Rogal, L. Lityńska-Dobrzyńska	2019, 35, 3, 349-360	L. Rogal, L. Lityńska-Dobrzyńska
47.	Materials Transactions	47.1	Microstructure of MgZn matrix composite reinforced with nano-SiC prepared by thixomolding	Ł. Rogal, P. Bobrowski, K. Stan-Głowińska, M. Szlezynger, L. Lityńska-Dobrzyńska	2019, 60, 5, 704-707	Ł. Rogal, P. Bobrowski, K. Stan-Głowińska, M. Szlezynger, L. Lityńska-Dobrzyńska
		47.2	SEM and TEM Studies on In-Situ Cast AlTiC Composites	W. Maziarz, A. Wójcik, P. Bobrowski, A. Bigos, Ł. Szymański, P. Kurtyka, N. Rylko E. Olejnik	2019, 60, 5, 714-717	W. Maziarz, A. Wójcik, P. Bobrowski, A. Bigos
		47.3	Structure and Mechanical Properties of Multi-Functional	T. Goryczka, M. Zubko, J. Lelaćko, P. Salwa, T. Wierzchoń,	2019, 60, 5, 693-697	J. Wojewoda-Budka, M. Janusz-Skuza

			Layer Deposited on Surface of Ni-Ti Shape Memory Alloy	J. Wojewoda-Budka, M. Janusz-Skuza		
48.	Metals-Open Access Metallurgy Journal	48.1	Grain boundary complexions and phase transformations in Al- and Cu-based alloys	O. Kogtenkova, B. Straumal, A. Korneva, T. Czeppe, A. Wierzbicka- Miernik, M. Faryna, P. Zięba	2019, 9, 1, 10	A. Korneva, T. Czeppe, A. Wierzbicka-Miernik, M. Faryna, P. Zięba
		48.2	Influence of nickel powders on corrosion resistance of cold sprayed coatings on Al7075 substrate	M. Scendo, W. Żórawski, A. Góral	2019, 9, 8, 890	A. Góral
49.	Metals and Materials International	49.1	Microstructure and Mechanical Properties of Al–Co–Cr–Fe–Ni Base High Entropy Alloys Obtained Using Powder Metallurgy	Ł. Rogal, Z. Szklarz, P. Bobrowski, D. Kalita, G. Garzeł, A. Tarasek, M. Kot, M. Szlezzynger	2019, 25, 4, 920-945	Ł. Rogal, P. Bobrowski, D. Kalita, G. Garzeł, A. Tarasek, M. Szlezzynger
50.	Metallurgical and Materials Transactions A	50.1	A new metric for the space of macroscopic parameters of grain interfaces	A. Morawiec	2019, 50A, 4012–4015	A. Morawiec
		50.2	The Effect of Fe Addition on Fragmentation Phenomena, Macrostructure, Microstructure, and Hardness of TiC-Fe Local Reinforcements Fabricated In Situ in Steel Casting	E. Olejnik, T. Tokarski, G. Sikora, S. Sobula, W. Maziarz, Ł. Szymański, B. Grabowska	2019, 50A, 975-986	W. Maziarz
51.	Microelectronics International	51.1	Study of lamination quality of solar modules with PMMA front layer	K. Drabczyk, P. Sobik, Z. Starowicz, K. Gawlińska, A. Pluta, B. Drabczyk	2019, 36, 3, 100-103	K. Drabczyk, P. Sobik, Z. Starowicz, K. Gawlińska, B. Drabczyk

		51.2	The impact of ribbon treatment on the interconnection of solar cells within a glass free PV module	P. Sobik, R. Pawłowski, A. Pluta, O. Jeremiasz, K. Drabczyk, G. Kulesza-Matlak, P. Zięba	2019, 36, 3, 95-99	K. Drabczyk, G. Kulesza-Matlak, P. Zięba
		51.3	The influence of emitter resistance on the electrical parameters of mono- and multicrystalline silicon solar cells	B. Swatowska, P. Panek D. Michoń A. Drygała	2019, 36, 90-94	P. Panek
52.	Modelling and Simulation in Materials Science and Engineering	52.1	On 2D interface networks that are translation-invariant under curvature-driven migration	A. Morawiec	2019, 27, 1, 015003	A. Morawiec
53.	Molecular Catalysis	53.1	Solvent and substituent effects in hydrogenation of aromatic ketones over Ru/polymer catalyst under very mild conditions	D. Duraczyńska, E.M. Serwicka, A. Drelinkiewicz, R.P. Socha, M. Zimowska, L. Lityńska-Dobrzyńska, A. Bukowska	2019, 470, 145–151	L. Lityńska-Dobrzyńska
54.	Nanomaterials	54.1	Investigation of the Surface of Ga-Sn-Zn Eutectic Alloy by the Characterisation of Oxide Nanofilms Obtained by the Touch-Printing Method	A. Dobosz,; T. Daeneke, A. Zavabet, B.Y. Zhang, R. Orrell-Trigg, K. Kalantar-Zadeh, A. Wojcik, W. Maziarz, T. Gancarz	2019, 9, 235	A. Dobosz, T. Gancarz, A. Wójcik, W. Maziarz
		54.2	Growth Kinetics of the Selected Intermetallic Phases in Ni/Al/Ni System with	I. Kwiecień, P. Bobrowski, A. Wierzbicka- Miernik, L. Lityńska-Dobrzyńska,	2019, 9, 134	P. Bobrowski, A. Wierzbicka-Miernik,

			Various Nickel Substrate Microstructure	J. Wojewoda-Budka		L. Lityńska-Dobrzyńska, J. Wojewoda-Budka
		54.3	Composite Nanofibers Containing Multiwall Carbon Nanotubes as Biodegradable Membranes in Reconstructive Medicine	A. Hudecki, D. Łyko-Morawska, W. Likus, M. Skonieczna, J. Markowski, R. Wilk, A. Kolano-Burian, W. Maziarz, J. Adamska, M. J. Łos	2019, 9, 63	W. Maziarz
55.	Nano-structures & nano-objects	55.1	On the morphological investigation of Pt dispersion and structure of alumina-platinum composites obtained by thermal oxidation of Al-Pt nano-thin layers	K. Reszka, J. Morgiel, T. Rydzkowski, V.K. Thakur	2019, 17, 229-238	J. Morgiel
56.	Opto-Electronics Review	56.1	A solution-processable small-organic molecules containing carbazole or phenoxazine structure as hole-transport materials for perovskite solar cells	K. Gawlińska- Nęcek, Z. Starowicz, D. Tavgeniene, G. Krucaite, S. Grigalevicius, E. Schab-Balcerzak, M. Lipiński	2019, 27, 137-142	K. Gawlińska- Nęcek, Z. Starowicz, M. Lipiński
		56.2	Effect of annealing on the structural properties of arsenic-implanted mercury cadmium telluride.	I.I. Izhnina, O.I. Fitsych, Z.Swiatek, J. Morgiel, O.Yu. Bonchyyk, H.V. Savytskyy, K.D. Mynbaevf, A.V. Voitsekhovskii, A.G. Korotaev,	2019, 27, 14–17	Z. Świątek, J. Morgiel

				M.V. Yakushev, D.V. Marin, V.S. Varavin, S.A. Dvoretzky		
57.	Procedia Manufacturing	57.1	On Consonance between a Mathematical Method for the CET Prediction and Constrained / Unconstrained Solidification	W. Wołczyński, A.A. Ivanowa, P. Kwapisiński	2019, 30, 459-466	W. Wołczyński
58.	Progress in Organic Coatings	58.1	Correlative microscopic characterization of biomechanical and biomimetic advanced CVD coatings on a PEEK substrate	Ł. Major, J.M. Lackner, M. Kot, B. Major	2019, 134, 244-254	Ł. Major, B. Major
59.	Scripta Materialia	59.1	A special single variant zone in directionally solidified Ni-Mn- Ga alloy	Y. Dai, L. Hou, R. Chulist, Y. Fautrelle, Z. Li, B. Yang, C. Esling, Z. Ren, X. Li	2019,167, 105-109	R. Chulist
		59.2	Competition for impurity atoms between defects and solid solution during high pressure torsion	A.A. Mazilkin, B.B. Straumal, A.R. Kilmametov, T. Boll, B. Baretzky, O.A. Kogtenkova, A. Korneva, P. Zięba	2019, 173, 46-50	A. Korneva, P. Zięba
		59.3	Non-conventional twins in five-layer modulated Ni-Mn- Ga martensite	H. Seiner, R. Chulist, W. Maziarz, A. Sozinov, O. Heczko, L. Straka	2019, 162, 497–502	R. Chulist, W. Maziarz
		59.4	Tracer diffusion in the Ni– CoCrFeMn system: Transition from a dilute solid solution to a high entropy alloy	J. Kottke, M. Laurent-Brocq, A. Fareed, D. Gaertner, L. Perrière, Ł. Rogal, S. V. Divinski, G. Wilde	2019, 159, 94-98	Ł. Rogal

60.	Semiconductor Physics, Quantum Electronics & Optoelectronics	60.1	Features of structural changes in mosaic Ge:Sb according to X-ray diffractometry and electron backscatter diffraction data	M.D. Borchal, M.S. Solodkyi, S.V. Balovsyak, V.M. Tkach, I.I. Hutsuliak, A.R. Kuzmin, O.O. Tkach, V.P. Kladko, O.Yo. Gudymenko, O.I. Liubchenko, Z. Świątek	2019, 22, 4, 381-386	Z. Świątek
61.	Surface & Coatings Technology	61.1	Oxidation behaviour of thin Ni/Al ₂ O ₃ nanocomposite coatings electrodeposited on steel substrate	A. Góral, T. Czeppe, K. Berent	2019, 369, 95-104	A. Góral, T. Czeppe
		61.2	The effect of the standoff distance on the microstructure and mechanical properties of cold sprayed Cr ₃ C ₂ -25(Ni20Cr) coatings	A. Góral, W. Żórawski, M. Makrenek	2019, 361, 9-18	A. Góral
		61.3	TEM studies of low temperature cathode-plasma nitrated Ti6Al7Nb alloy	J. Morgiel, K. Szymkiewicz, Ł. Maj, M. Tarnowski, T. Wierzchoń	2019, 359, 183-189	J. Morgiel, K. Szymkiewicz, Ł. Maj
		61.4	Effect of temperature on gas oxynitriding of Ti-6Al-4V alloy	I. Pohrelyuk, J. Morgiel, O. Tkachuk, K. Szymkiewicz	2019, 360, 103-109	J. Morgiel, K. Szymkiewicz
62.	Thermochimica Acta	62.1	Structural and physical studies of the Ag-rich alloys from Ag-Li system	S. Terlicka, A. Dębski, A. Budziak, M. Zabrocki, W. Gąsior	2019, 673, 185-191	S. Terlicka, A. Dębski, M. Zabrocki, W. Gąsior

2. Publikacje nie zamieszczone w wykazie czasopism

1.	International Journal „NDT Days”	1.1	Thermo-mechanical Study of the Cu-Zr Ribbon with 2% V Addition for Amorphous-nano Crystalline Composites	G. Stefanov, T. Czepe, S. Gyurov, K. Janik, A. Wierzbicka-Miernik	2019, 2, 2, 141-152	T. Czepe, A. Wierzbicka-Miernik
2.	Key Engineering Materials	2.1	Electron and Laser Beam Additive Manufacturing with Wire-Comparison of Processes	M. S. Węglowski, S. Błacha, R. Jachym, J. Dutkiewicz, Ł. Rogal, B. Antoszewski, H. Danielewski	2019, 799, 294-299	J. Dutkiewicz, Ł. Rogal
3.	Rudy i Metale Nieżelazne	3.1	Kierunki badań Instytutu Metalurgii I Inżynierii Materiałowej PAN	P. Zięba	2019, 64, 15-22	P. Zięba
		3.2	Mikrostruktura i właściwości kompozytów na osnowie aluminium odlewanych in-situ wzmacnianych nanocząstkami SiC	W. Maziarz, P. Kurtyka, E. Olejnik	2019, 5, 64, 124-131	W. Maziarz
		3.3	Mikrostruktura i właściwości materiałów odkształcanych w złożonych schematach deformacji do zastosowań biomedycznych	M. Bieda, A. Jarzębska, J. Kawałko, W. Pachla, K. Sztwiertnia	2019, 64, 5, 100-107	M. Bieda, A. Jarzębska, K. Sztwiertnia
4.	Solid State Phenomena	4.1	Effect of Nano-SiC on Microstructure and Mechanical Properties of AZ91 Magnesium Alloy Processed by Thixomolding	Ł. Rogal, B. Baran, P. Bobrowski, A. Tarasek, P. Ozga, L. Lityńska-Dobrzyńska	2019, 285, 133-138	Ł. Rogal, P. Bobrowski, A. Tarasek, P. Ozga, L. Lityńska-Dobrzyńska

3. Materiały konferencyjne

L.p.	Nazwa konferencji	L.p.	Tytuł	Autor (autorzy)	Rok, tom, str. (od-do)	Autor (autorzy) IMIM PAN
Publikacje konferencyjne opublikowane						
1.	PFAM-XXVII Processing and Fabrication of Advanced Materials, 27 maj 2019 – 29 maj 2019, Jönköping, Szwecja	1.1	Phase Composition and microstructure of antibacterial coatings deposited on titanium fabricated by hydrostatic extrusion	D. Wojtas, K. Wierzbanowski, M. Bieda, R. Chulist, A. Jarzębska, Ł. Maj, K. Sztwiertnia, M. Wróbel, W. Pachla, F. Muhaffel	2019, 274-280	M. Bieda, R. Chulist, A. Jarzębska, Ł. Maj, K. Sztwiertnia
2.	Conference proceedings - METAL 2019 May 22nd - 24'h 2019, Brno, Czech Republic	2.1	Extraction and purification of PGM solutions obtained from metallurgical treatment of used automotive catalytic converters	M. Saternus, A. Fornalczyk, W. Gąsior, A. Dębski, S. Terlicka	2019, 1381-1386	W. Gąsior, A. Dębski, S. Terlicka

4. Monografie

Lp.	Tytuł monografii	Autor (autorzy)	Rok, str. (od-do) ISBN, wydawca	Autor (autorzy) IMIM PAN
1.	Jakościowa i ilościowa charakterystyka mikrostruktury materiałów odkształconych plastycznie. Zastosowanie metod Mikroskopii Orientacji w TEM i SEM	M. Bieda-Niemiec	2019, 166, ISBN 978-83-60768-84-6, IMIM PAN	M. Bieda-Niemiec
2.	Inżynieria warstw półprzewodnikowych w ogniwie perowskitowym	K. Gawlińska - Nęcek	2019, 100, ISBN 978-83-60768-85-3, IMIM PAN	K. Gawlińska - Nęcek
3.	Amorficzne stopy na osnowie tytanu jako perspektywiczny materiał lutowniczy	A. Sypień	2019, 188, ISBN 978-83-60768-83-9, IMIM PAN	A. Sypień
4.	Wytwarzanie i charakterystyka kompozytów na osnowie miedzi wzmacnianych nanorurkami węglowymi	J. Grzegorek	2019,124, ISBN 978-83-60768-82-2 IMIM PAN	J. Grzegorek
5.	SURDAT 3. Database of physicochemical properties of alloys. ISBN 978-83-60768-08-2	W. Gąsior, A. Dębski	2019, 248 ISBN 978-83-60768-08-2 IMIM PAN	W. Gąsior, A. Dębski
6.	Proceedings of II European Summer School on Materials Science 28.VIII – 30.VIII 2019 Dresden	M. Bieda – Niemiec (red.)	2019, 95 ISBN 978-83-60768-87-7 IMIM PAN	M. Bieda – Niemiec (red.)
7.	Synergiczny wpływ dodatku magnezu i wyciskania hydrostatycznego na mikrostrukturę i właściwości biodegradowalnego materiału na bazie cynku.	A. Jarzębska	2019,125 ISBN 978-83-60768-89-1 IMIM PAN	A. Jarzębska
8.	Rola surfaktantów w procesie indukowanego elektroosadzania warstw Zn-Mo z roztworów cytrynianowych	A. Hara	2019,194 ISBN 978-83-60768-88-4	A. Hara

5. Rozdział w monografii

Lp.	Tytuł monografii	Tytuł rozdziału	Autor (autorzy)	Rok, str. (od-do) ISBN, wydawca	Autor (autorzy) IMIM PAN
1.	Diffusion Foundations (Volume 21) Edited by: Prof. Alope Paul ISSN 2296-3642	Periodic Layer Formation during Multiphase Diffusion in Silicide Systems	A. Kodentsov, J. Wojewoda-Budka, A. Wierzbicka-Miernik	2019, 2, 157-189	J. Wojewoda-Budka, A. Wierzbicka-Miernik
2.	Proceedings of II European Summer School on Materials Science 28.VIII-30.VIII 2019 Dresden ISBN 978-83-60768-87-7 Kraków-Drezden, 2019, 96	The effect of Co and Cu addition on martensitic transformation temperature, crystal structure and microstructure in Ni-Mn-Ga Hausler alloys	A.Brzoza S. Sumara, A. Wierzbicka-Miernik, W. Maziarz, T. Czeppe, E. Cesari, M. Szczerba	2019, 5-9	A.Brzoza S. Sumara, A. Wierzbicka-Miernik, W. Maziarz, T. Czeppe, M. Szczerba
		Effect of crystallographic orientation and temperature on superelastic strain of FeNiCoAlTa/ FeNiCoAlTaB single crystals	M. Czerny, G. Cios, A. Wójcik, M. Maziarz, Y.I. Chumlyakov, N. Schell, R. Chulist	2019, 10-15	M. Czerny, A. Wójcik, M. Maziarz, R. Chulist
		Deformation and recrystallization behavior of plane strain compressed aluminium bicrystals with {100}<011> / {110}<001> orientations	I. Mania, M. Miszczyk, H. Paul, R. Chulist, P. Petrzak	2019, 16-19	I. Mania, M. Miszczyk, H. Paul, R. Chulist, P. Petrzak
		Microstructure evolution of CrCoNi Medium-entropy alloys subjected to uniaxial tension	S. Sumara, M. Szczerba	2019, 20-23	S. Sumara, M. Szczerba
		Microstructural characterization and growth kinetics of the intermetallic phases in annealed	I. Kwiecień, P. Bobrowski, M. Janusz-Skuza,	2019, 24-28,	I. Kwiecień, P. Bobrowski, M. Janusz-Skuza,

	Ni201/A1050 and A1050/Ni201 explosive clads	A. Wierzbicka-Miernik, J. Wojewoda-Budka		A. Wierzbicka-Miernik, J. Wojewoda-Budka
	EBSD characterization of the relationships between crystallites forming selected mollusk shells	M. Strąg, Ł. Maj, M. Bieda, A. Jarzębska, K. Berent, K. Nalepa, A. G. Checa, K. Sztwiertnia	2019, 29-33	M. Strąg, Ł. Maj, M. Bieda, A. Jarzębska, K. Sztwiertnia
	Hemocompatibility of polymer-based coatings dedicated to functionalization of an animal origin heart valve	G. Imbir, A. Mzyk, K. Trembecka-Wójciga, H. Plutecka, R. Major	2019, 34-36	G. Imbir, A. Mzyk, K. Trembecka-Wójciga, R. Major
	Effect of gas nitriding temperature on microstructure of Ti6Al7Nb alloy	K. Szymkiewicz, J. Morgiel, M. Pomorska, O. Tkachuk	2019, 37-40	K. Szymkiewicz, J. Morgiel, M. Pomorska, O. Tkachuk
	Superelastic Ti-Nb alloys fabricated by powder metallurgy route	D. Kalita, Ł. Rogal, A. Kolano-Burian, P. Zackiewicz, J. Dutkiewicz	2019, 41-44	D. Kalita, Ł. Rogal, J. Dutkiewicz
	Ga-Sn-Zn liquid metal alloys – a multifaceted functional materials	A. Dobosz, T. Gancarz	2019, 45-51	A. Dobosz, T. Gancarz
	Thermodynamic properties of alloys from the ternary Ga-In-Li alloys	M. Zabrocki, W. Gąsior	2019, 52-56	M. Zabrocki, W. Gąsior
	Drop calorimetry method in mixing enthalpy and enthalpy of formation study in the Li-Ag-Sb alloys	M. Bugajska, S. Furtauer, P. Berger, H. Flandorfer, P. Fima	2019, 57-58	M. Bugajska, P. Fima

3.	Magnesium Technology 2019 978-3-030-05788-6 Springer, XXI, 370	TEM Studies of In Situ Formation of MgO and Al ₄ C ₃ During Thixomolding of AZ91 Magnesium Alloy Conducted in CO ₂	Ł. Rogal, L. Lityńska- Dobrzyńska, B. Baran	2019, 37-41	Ł. Rogal, L. Lityńska- Dobrzyńska,
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