



Contents

Materials Science Communications

- A novel aluminosilicate geopolymer material with low dielectric loss
X.-m. Cui, L.-p. Liu, Y. He, J.-y. Chen, J. Zhou 1
- Preparation and visible light photocatalytic activity of $\text{Zn}_{1-x}\text{Fe}_x\text{O}$ nanocrystalline
Q. Xiao, C. Yao 5
- Synthesis of MWCNT/nickel glycolate polymer core–shell nanostructures and their nonenzymatic electrocatalytic activity toward glucose
C. Guo, Y. Hu, Y. Liu, Y. Mu, Y. Miao, X. Hu 10
- First-principles investigations on mechanical stability and elastic properties of hexagonal tungsten dinitride under pressure
X.-F. Li, Z.-L. Liu, C.-L. Ding, H.-Z. Fu, G.-F. Ji 14
- Improved electrochemical performance of natural honeycomb templated LiSbO_3 as an anode in lithium-ion battery
M. Kundu, S. Mahanty, R.N. Basu 20

Articles

- Growth and spectroscopy studies of ADP single crystals with L-proline and L-arginine amino acids
F. Ben Brahim, A. Bulou 24
- Synthesis, structure, magnetic, electrical and electrochemical properties of Al, Cu and Mg doped MnO_2
A.M. Hashem, H.M. Abuzeid, N. Narayanan, H. Ehrenberg, C.M. Julien 33
- Facile synthesis, thermal, magnetic, Raman characterizations of spinel structure ZnMn_2O_4
H. Li, B. Song, W.J. Wang, X.L. Chen 39
- Surface characteristics, properties and *in vitro* biological assessment of a NiTi shape memory alloy after high temperature heat treatment or surface H_2O_2 -oxidation: A comparative study
T. Sun, M. Wang, W.-C. Lee 45
- Effect of templates on inverse opals fabricated through annular self-assembly/sol–gel method
D. Ge, L. Yang, Z. Fan, J. Zhao, Y. Li 59
- Synthesis and characterization of heterostructured nanohybrid of $\text{MgO-TiO}_2\text{-Al}_2\text{O}_3$ /montmorillonite
B. Dou, H. Chen, Y. Song, C. Tan 63
- Silica enhanced formation of hydroxyapatite nanocrystals in simulated body fluid (SBF) at 37 °C
M.S. Sadjadi, H.R. Ebrahimi, M. Meskinfam, K. Zare 67
- A facile method for the room-temperature synthesis of water-soluble magnetic Fe_3O_4 nanoparticles: Combination of in situ synthesis and decomposition of polymer hydrogel
Z. Xiong, Z.-B. Sun, M.-L. Zheng, Y.-Y. Cao, F. Jin, W.-Q. Chen, Z.-S. Zhao, X.-M. Duan 72
- Synthesis of ZnO nanoflowers by solution plasma
G. Saito, S. Hosokai, T. Akiyama 79
- Nanostructured Nb_2O_5 –natural hydroxyapatite formed by the mechanical alloying method: A bulk composite
W.J. Nascimento, T.G.M. Bonadio, V.F. Freitas, W.R. Weinand, M.L. Baesso, W.M. Lima 84
- Effect of linear alcohol molecular size on the self-assembly of fullerene whiskers
M.S. Amer, T.K. Todd, J.D. Busbee 90
- A-site substitution effect of strontium on bismuth layered $\text{CaBi}_4\text{Ti}_4\text{O}_{15}$ ceramics on electrical and piezoelectric properties
A. Tanwar, M. Verma, V. Gupta, K. Sreenivas 95

Large-scale synthesis and growth conditions dependence on the formation of CuGeO ₃ nanowires L.Z. Pei, L.J. Yang, Y. Yang, C.G. Fan, C.Z. Yuan, Q.-F. Zhang	104
Structural, linear and enhanced third-order nonlinear optical properties of Bi ₁₂ SiO ₂₀ nanocrystals H. Sekhar, P.P. Kiran, D.N. Rao	113
Density–structure correlations in fluoride-containing bioactive glasses D.S. Brauer, A. Al-Noaman, R.G. Hill, H. Doweidar	121
Mechanical and electrical properties of novel poly(ether ether ketone)/carbon nanotube/inorganic fullerene-like WS ₂ hybrid nanocomposites: Experimental measurements and theoretical predictions A.M. Díez-Pascual, M. Naffakh, M.A. Gómez-Fatou.	126
Environment effect on the optical and photophysical investigation of Al(III)Porphyrins doped hybrid borate glasses N. Venkatramaiah, N. Veeraiah, R. Venkatesan	134
Electronic and magnetic properties of perfect and defected germanium nanoribbons Q. Pang, Y. Zhang, J.-M. Zhang, V. Ji, K.-W. Xu	140
Effect of deposition temperature on microstructure and corrosion resistance of ZrN thin films deposited by DC reactive magnetron sputtering D. Roman, J. Bernardi, C.L.G. de Amorim, F.S. de Souza, A. Spinelli, C. Giacomelli, C.A. Figueroa, I.J.R. Baumvol, R.L.O. Basso	147
Anisotropy of hardness and laser damage threshold of unidirectional organic NLO crystal in relation to the internal structure V. Natarajan, M. Arivanandhan, K. Sankaranarayanan, Y. Hayakawa	154
Hydrothermal synthesis of CdTe QDs: Their luminescence quenching in the presence of bio-molecules and observation of bistable memory effect in CdTe QD/PEDOT:PSS heterostructure J. Khatei, K.S.R. Koteswara Rao	159
Preparation and characterization of sol–gel derived (Li,Ta,Sb) modified (K,Na)NbO ₃ lead-free ferroelectric thin films L. Wang, R. Zuo, L. Liu, H. Su, M. Shi, X. Chu, X. Wang, L. Li	165
Nanocrystalline MoS ₂ through directional growth along the (0 0 2) crystal plane under high pressure S. Wang, Z. Wang, J. Qin, W. Wang, W. Li, D. He	170
Thermoluminescence studies of solution combustion synthesized Y ₂ O ₃ :Nd ³⁺ nanophosphor J.R. Jayaramaiah, B.N. Lakshminarasappa, B.M. Nagabhushana.	175
Determination of heat transfer coefficients at metal–mold interface during horizontal unsteady-state directional solidification of Sn–Pb alloys J.N. Silva, D.J. Moutinho, A.L. Moreira, I.L. Ferreira, O.L. Rocha	179
Synthesis of novel anode Li ₄ Ti ₅ O ₁₂ /C with PAN as carbon source and its electrochemical performance Y.-H. Yin, S.-Y. Li, Z.-J. Fan, X.-L. Ding, S.-T. Yang.	186
Structural, dielectric and ferroelectric study of microwave sintered lanthanum substituted BaTiO ₃ ceramics S. Sharma, R.K. Patel, C. Prakash, P. Kumar	191
Stability analysis and structural rules of titanium dioxide clusters (TiO ₂) _n with n = 1–9 W. Zhang, Y. Han, S. Yao, H. Sun	196
Enhanced photovoltaic performances of dye-sensitized solar cell using self-charring phosphate ester surfactant M.-S. Kang, Y. Yang, S.-S. Jee, S.-J. Kwon, E.S. Lee, J.-Y. Bae.	203
Fullerene nanowhiskers at liquid–liquid interface: A facile template for metal oxide (TiO ₂ , CeO ₂) nanofibers and their photocatalytic activity M. Sathish, K. Miyazawa, J. Ye	211
Effect of pre-deposited carbon layer on the formation of carbon nitride nanostructures prepared by radio-frequency plasma enhanced chemical vapour deposition N.H. Khanis, R. Ritikos, M. Othman, N.M.A. Rashid, S.M.A. Gani, M.R. Muhamad, S.A. Rahman	218
Conjugated copolymers based on poly(fluorenylene vinylene) derivatives containing push–pull units: Synthesis and characterization J.N. de Freitas, R.W.C. Li, A.F. Nogueira, J. Gruber	223
Synthesis and characterization of poly(o-toluidine)/functionalized multi-walled carbon nanotubes nanocomposites with improved electrical conductivity A. Choudhury	231
Electron beam processed plasticized epoxy coatings for surface protection M.S. Ibrahim, H.A. Mohamed, N.G. Kandile, H.M. Said, I.M. Mohamed	237
Porous carbon nanospheres derived from chlorination of bis(cyclopentadienyl)titanium dichloride and their electrochemical capacitor performance P. González-García, T.A. Centeno, E. Urones-Garrote, D. Ávila-Brandé, L.C. Otero-Díaz.	243
Formation of the surface layer in hypoeutectic Al-alloy high-pressure die castings S. Otarawanna, C.M. Gourlay, H.I. Laukli, A.K. Dahle	251

Structural and dielectric characterization of praseodymium-modified lead titanate ceramics synthesized by the OPM route A.H. Pinto, F.L. Souza, E. Longo, E.R. Leite, E.R. Camargo	259
Reversible conversion between AgCl and Ag in AgCl-doped $\text{RSiO}_{3/2}$ - TiO_2 films prepared by a sol-gel technique G. Kawamura, Y. Tsurumi, H. Muto, M. Sakai, M. Inoue, A. Matsuda	264
Microwave-polyol synthesis and electrocatalytic performance of Pt/graphene nanocomposites C.-S. Liao, C.-T. Liao, C.-Y. Tso, H.-J. Shy	270
One-pot synthesis of PANI- TiO_2 (anatase) hybrid of low electrical resistance using TiCl_4 as precursor K.U. Savitha, H. Gurumalles Prabu	275
Tuning magnetic critical behaviour in Ti-manganites by doping with vacancies in A-sites: $\text{Sr}_{1-x}\square_x\text{LaMnTiO}_{6-\delta}$ ($0 < x \leq 0.15$) D. Alonso-Domínguez, I. Álvarez-Serrano, G. Cuello, M. García-Hernández, M.L. López, C. Pico, M.L. Veiga	280
Structural, magnetic, electrical and electrochemical properties of NiFe_2O_4 synthesized by the molten salt technique B. Senthilkumar, R. Kalai Selvan, P. Vinothbabu, I. Perelshtein, A. Gedanken	285
Structural and luminescence characteristics of $\text{SnO}_2\text{:Eu}$ and $\text{SnO}_2\text{:Eu,Sb}$ nanophosphors upon annealing at high temperatures V. Kiisk, T. Kangur, M. Paalo, T. Tätte, S. Lange, S. Pikker, I. Sildos	293
Effects of ultraviolet treatment on the optical and structural properties of ZnO nanoparticles C.-L. Tsai, Y.-C. Tseng, W.-M. Cho, Y.-J. Lin, H.-C. Chang, Y.-H. Chen, C.-H. Lin	299
Immersion-induced changes in structure and properties of a TTCP/DCPA/CSH cement C.-P. Ju, S.-H. Hung, C.-K. Chen, W.-L. Chen, J.-W. Lee, R.-M. Lin, W.-C. Chen, J.-H. Chern Lin	303
Graphitization of unburned carbon from oil-fired fly ash applied for anode materials of high power lithium ion batteries T.-S. Yeh, Y.-S. Wu, Y.-H. Lee	309
Controlled synthesis of octahedral Cu_2O on TiO_2 nanotube arrays by electrochemical deposition L. Huang, F. Peng, H. Wang, H. Yu, W. Geng, J. Yang, S. Zhang, H. Zhao	316
Synthesis, growth, structural, optical and thermal properties of a new semiorganic nonlinear optical guanidinium perchlorate single crystal V. Sivashankar, R. Siddheswaran, P. Murugakoothan	323
Effect of nitrogen addition on the morphology, magnetic and magnetoresistance properties of electrodeposited Co, Ni and Co-Ni granular thin films onto aluminum substrates S.I. Tanase, D. Pinzaru (Tanase), P. Pascariu, M. Dobromir, A.V. Sandu, V. Georgescu	327
Arrays of Au- TiO_2 Janus-like nanoparticles fabricated by block copolymer templates and their photocatalytic activity in the degradation of methylene blue X. Fu, J. Liu, H. Yang, J. Sun, X. Li, X. Zhang, Y. Jia	334
Structural, optical and magnetic properties of Mn diffusion-doped CdS thin films prepared by vacuum evaporation S. Aksu, E. Bacaksiz, M. Parlak, S. Yilmaz, I. Polat, M. Altunbaş, M. Türksöy, R. Topkaya, K. Özdoğan	340
Optical properties and energy transfer behavior from Tb^{3+} to Mn^{2+} ions in co-doped zinc strontium phosphate glasses X. Liang, Z. Xing, Y. Liu, W. Xu, Y. Yang, G. Chen	346
Spark plasma sintering of the nonstoichiometric ultrafine-grained titanium carbides with nano superstructural domains of the ordered carbon vacancies J. Xiang, W. Hu, S. Liu, C. Chen, Y. Zhang, P. Wang, H. Wang, F. Wen, B. Xu, D. Yu, J. He, Y. Tian, Z. Liu	352
Stabilized amorphous glibenclamide nanoparticles by high-gravity technique L. Yu, C. Li, Y. Le, J.-F. Chen, H. Zou	361
Comparative study on nanostructured MnO_2 /carbon composites synthesized by spontaneous reduction for supercapacitor application Y.-P. Lin, C.-B. Tsai, W.-H. Ho, N.-L. Wu	367
Study of rhabdite (iron nickel phosphide) microcrystals extracted from Sikhote-Alin iron meteorite by magnetization measurements and Mössbauer spectroscopy M.I. Oshtrakh, M.Y. Larionov, V.I. Grokhovsky, V.A. Semionkin	373
Electrical behavior of $\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})_{0.5}(\text{Fe}_{0.5}\text{Nb}_{0.5})_{0.5}\text{O}_3$ ceramics N. Kumar, A. Ghosh, R.N.P. Choudhary	381
Electrosynthesis and catalytic properties of magnesium oxide nanocrystals with porous structures G. Yuan, J. Zheng, C. Lin, X. Chang, H. Jiang	387
Deposition of nanocrystalline CuS thin film from a single precursor: Structural, optical and electrical properties S.K. Maji, N. Mukherjee, A.K. Dutta, D.N. Srivastava, P. Paul, B. Karmakar, A. Mondal, B. Adhikary	392
Effect of cerium doping on the structural and optoelectrical properties of CdO nanocrystallite thin films A.A. Dakhel	398
Structural evolution of hollow Al_2O_3 particles formed on excimer laser-induced bubbles Z. Yan, Q. Zhao, D.B. Chrisey	403
Electron magnetic resonance of diluted solid solutions of Gd^{3+} in SrTiO_3 R.S. de Biasi, M.L.N. Grillo	409

Laminar pattern induced by cycling thermomechanical stress in two-phase materials C.C. Chang, Y.J. Chen, M.Y. Tsai, C.R. Kao	413
Preparation of luminescent and optical limiting silicon nanostructures by nanosecond-pulsed laser ablation in liquids E. Fazio, F. Barreca, S. Spadaro, G. Currò, F. Neri	418
Control of Cu-doping and optical properties of ZnO quantum dots by laser ablation of composite targets W.-J. Qin, J. Sun, J. Yang, X.-W. Du.	425
New evidence on the nature of the metastable S'-phase on Al-Cu-Mg alloys O. Novelo-Peralta, I.A. Figueroa, G. Lara-Rodríguez, G. González	431
Fabrication and electromagnetic characteristics of microwave absorbers containing PPY and carbonyl iron composite D.-A. Li, H.-B. Wang, J.-M. Zhao, X. Yang	437
Studies on electrical and dielectric properties of PVP:KBrO ₄ complexed polymer electrolyte films M. Ravi, Y. Pavani, K. Kiran Kumar, S. Bhavani, A.K. Sharma, V.V.R. Narasimha Rao	442
Effect of microwave and conventional heating on sintering behavior and properties of Al-Mg-Si-Cu alloy C. Padmavathi, A. Upadhyaya, D. Agrawal	449
Structural properties and bonding nature of 3-methyl-4-phenyl-5-(2-pyridyl)-1,2,4-triazole single crystal A.H. Reshak, D. Stys, S. Auluck, I.V. Kityk, H. Kamarudin.	458
A facial one-pot route synthesis and characterization of Y-stabilized Sb ₂ O ₃ solar reflective thermal insulating coatings Z. Wang, J. Liu, F. Wang, X. Yu.	466
Synthesis and characterization of novel liquid-crystalline azo-dyes bearing two amino-nitro substituted azobenzene units and a well-defined, oligo(ethylene glycol) spacer C. Caicedo, E. Rivera, Y. Valdez-Hernández, M. del P. Carreón-Castro.	471
Fabrication of silver hollow microspheres by sodium hydroxide in glycerol solution T. Preuksarattanawut, S. Asavavisithchai, E. Nisaratanaporn	481
Unidirectional growth and characterization of L-arginine monohydrochloride monohydrate single crystals K. Sangeetha, R.R. Babu, G. Bhagavannarayana, K. Ramamurthi.	487
Synthesis and characterization of iodine ion doped mesoporous TiO ₂ by sol-gel method Y. Wang, J. Ren, G. Liu, P. Peng	493
Structural, morphological and scintillation properties of Ce ³⁺ -doped Y ₃ Al ₅ O ₁₂ powders and films elaborated by the sol-gel process A. Potdevin, G. Chadeyron, V. Briois, R. Mahiou.	500
Behavior of NiO-MnO ₂ /MWCNT composites for use in a supercapacitor S.-G. Hwang, S.-H. Ryu, S.-R. Yun, J.M. Ko, K.M. Kim, K.-S. Ryu	507
Mössbauer, magnetic and electric studies on mixed Rb-Zn ferrites prepared by solution combustion method M. Gupta, B.S. Randhawa.	513
In situ generation of silver microstructures by thermal decomposition of silver <i>n</i> -dodecanethiolate dispersed in an organic-inorganic hybrid coating M.L. Gómez, C.E. Hoppe, R.J.J. Williams	519
Distribution of arsenic on micro-interfaces in a kind of Cr, Nb and Ti microalloyed low carbon steel produced by a compact strip production process Y.Z. Zhu, J.C. Li, D.M. Liang, P. Liu.	524
Enhanced visible light photocatalysis by manganese doping or rapid crystallization with ZnO nanoparticles M.A. Mahmood, S. Baruah, J. Dutta	531
Effect of boron addition on pitting corrosion resistance of modified 9Cr-1Mo steel: Application of electrochemical noise M.G. Pujar, C.R. Das, S. Thirunavukkarasu, U. Kamachi Mudali, A.K. Bhaduri, J. Brijitta, B.V.R. Tata	536
Characterization of iron(III) oxide/hydroxide nanostructured materials produced by sol-gel technology based on the Fe(NO ₃) ₃ ·9H ₂ O-C ₂ H ₅ OH-CH ₃ CHCH ₂ O system L. Durães, A. Moutinho, I.J. Seabra, B.F.O. Costa, H.C. de Sousa, A. Portugal	548
Preparation and characterization of nano hydroxyapatite/polymeric composites materials. Part I K.R. Mohamed, Z.M. El-Rashidy, A.A. Salama	561
Electrochemical performance of mixed crystallographic phase nanotubes and nanosheets of titania and titania-carbon/silver composites for lithium-ion batteries S.K. Das, A.J. Bhattacharyya	569
Chemical bonding of ultra low expansion glass substrates with aqueous NaOH solution K. Green, J. Burke, B. Oreb	577
Fabrication of silica coated Al ₂ O ₃ nanoparticles via a fast and facile route utilizing microwave irradiation I.A. Siddiquey, T. Furusawa, M. Sato, N.M. Bahadur, N. Suzuki	583

Microwave absorption measurements in the complex perovskite $\text{Pb}(\text{Fe}_{0.5}\text{Ta}_{0.5})\text{O}_3$: Detection of short-range orderly regions	
G. Alvarez, H. Montiel, M.A. Castellanos, J. Heiras, R. Zamorano	587
Electronic transport mechanism of CdTe nanocrystalline	
M.S. Abd El-sadek, I.S. Yahia, A.M. Salem	591
Functionalized carbon nanotubes in ZnO thin films for photoinactivation of bacteria	
O. Akhavan, R. Azimirad, S. Safa	598
Effect of rare earth additions on magnetic properties of $\text{Fe}_{82}\text{Nb}_2\text{B}_{14}\text{RE}_2$ (RE = Y, Gd, Tb and Dy) amorphous alloys	
A. Chrobak, V. Nosenko, G. Haneczok, L. Boichyshyn, B. Kotur, A. Bajorek, O. Zivotsky, A. Hendrych	603
Enhanced formation and morphological stability of low-resistivity CoSi_2 nanodot arrays on epitaxial $\text{Si}_{0.7}\text{Ge}_{0.3}$ virtual substrate	
S.L. Cheng, C.Y. Yang, S.W. Lee, H.F. Hsu, H. Chen	609
Microwave absorption properties of $\text{Fe@Al}_2\text{O}_3$ nanoembedments prepared by mechanosynthesis	
Z.-d. Zhang, Z.-c. Shi, R.-h. Fan, M. Gao, J.-y. Guo, X.-g. Qi, K.-n. Sun	615
Improved optical transmittance of Al-doped ZnO thin films by use of ZnO nanorods	
W.-L. Lu, P.-K. Hung, C.-I. Hung, C.-H. Yeh, M.-P. Houn	619
Novel and facile synthesis of magnetic composites by a modified co-precipitation method	
V.L. Lassalle, R.D. Zysler, M.L. Ferreira	624
Performance variation from triphenylamine- to carbazole-triphenylamine-rhodaniline-3-acetic acid dyes in dye-sensitized solar cells	
C.-H. Yang, W.-C. Lin, T.-L. Wang, Y.-T. Shieh, W.-J. Chen, S.-H. Liao, Y.-K. Sun	635
Influence of chemical modification on the porous structure of polymeric adsorbents	
M. Jaćkowska, S. Bocian, B. Gawdzik, M. Grochowicz, B. Buszewski	644
Growth kinetics of the solid-state interfacial reactions in the Sn-Cu/Co and Sn/Co-Cu couples	
C.-h. Wang, C.-y. Kuo	651
Ethylenediamine-modified multiwall carbon nanotubes as a Pt catalyst support	
G.D. Vuković, M.D. Obradović, A.D. Marinković, J.R. Rogan, P.S. Uskoković, V.R. Radmilović, S.L. Gojković	657
Wetting of B_4C , TiC and graphite substrates by molten Mg	
D. Zhang, P. Shen, L. Shi, Q. Jiang	665
Preparation of reduced graphene oxide/cobalt oxide composites and their enhanced capacitive behaviors by homogeneous incorporation of reduced graphene oxide sheets in cobalt oxide matrix	
H.-W. Wang, Z.-A. Hu, Y.-Q. Chang, Y.-L. Chen, Z.-Y. Zhang, Y.-Y. Yang, H.-Y. Wu	672
Damping, thermal, and mechanical properties of montmorillonite modified castor oil-based polyurethane/epoxy graft IPN composites	
S. Chen, Q. Wang, T. Wang	680
<i>Ab initio</i> analysis of the optical, electronic and elastic properties of the hydrogen-storage single crystals LiNH_2	
M.G. Brik, I.V. Kityk	685
Sol-gel produced sodium calcium phosphosilicates for bioactive applications: Synthesis and structural characterisation	
D. Carta, R.J. Newport, J.C. Knowles, M.E. Smith, P. Guerry	690
The role of <i>Spirulina platensis</i> on corrosion behavior of carbon steel	
B.D. Mert, M.E. Mert, G. Kardaş, B. Yazıcı	697
Chemical changes in PMMA as a function of depth due to proton beam irradiation	
S.Z. Szilasi, R. Huszank, D. Szikra, T. Váczi, I. Rajta, I. Nagy	702
Surface analysis of localized corrosion of austenitic 316L and duplex 2205 stainless steels in simulated body solutions	
M. Conradi, P.M. Schön, A. Kocijan, M. Jenko, G.J. Vancso	708
Preparation and flammability properties of intumescent flame retardant-functionalized layered double hydroxides/poly-methyl methacrylate nanocomposites	
G. Huang, A. Zhuo, L. Wang, X. Wang	714
Characterization and corrosion of polypyrrole/sodium dodecylbenzene sulfonate electropolymerised on aluminum alloy 1100	
K.R.L. Castagno, V. Dalmoro, D.S. Azambuja	721
Hydrothermal synthesis of nanocrystalline zeolite Beta by acid-catalyzed hydrolysis of tetraethylorthosilicate	
F. Cao, Y. Wu, J. Gu, J. Wang	727
High diffuse reflection of light using a textured 304BA stainless steel substrate	
S.-J. Lee, C.-Y. Lin, S.-L. Cheng, W.-C. Ke	733
Effect of Mn content on the austenite-martensite phases and magnetic properties in Fe-Mn-Co alloys	
U. Sarı, T. Kirindı	738

Influence of chloride ion concentration on the corrosion behavior of Al-bearing TRIP steels F. El-Taib Heakal, N.S. Tantawy, O.S. Shehta.	743
Effect of Te addition on the optical properties of As ₂ S ₃ thin film R. Naik, C. Kumar, R. Ganesan, K.S. Sangunni.	750
Synthesis of Lu ₂ Ti ₂ O ₇ powders by molten salt method B.-r. Li, H.-b. Chang, D.-y. Liu, X.-n. Yuan.	755
Structure–property relationship in aliphatic polyamide/polyaniline surface layered composites K. Fatyeyeva, A.A. Pud, J.-F. Bardeau, M. Tabellout.	760
Electrical and structural characterisation of nanostructured titania coatings deposited on interdigitated electrode system M. Milanović, G. Stojanović, L.M. Nikolić, M. Radovanović, B. Škorić, A. Miletić.	769
Influence of bonding environment on nano-mechanical properties of nitrogen containing hydrogenated amorphous carbon thin films N. Dwivedi, S. Kumar, H.K. Malik, C.M.S. Rauthan, O.S. Panwar.	775
Preparation of ultra-light magnetic nanocomposites using highly concentrated emulsions G. Ghosh, A. Vilchez, J. Esquena, C. Solans, C. Rodríguez-Abreu.	786
Polystyrene-grafted graphene with improved solubility in organic solvents and its compatibility with polymers Y.-T. Liu, J.-M. Yang, X.-M. Xie, X.-Y. Ye.	794
Microstructural, optical and magnetic properties of cobalt-doped zinc oxysulfide thin films İ. Polat, S. Aksu, M. Altunbaş, E. Bacaksız.	800
Experimental investigation and thermodynamic calculation of the phase equilibria in the Fe–Nb–Ti ternary system C.P. Wang, J.P. Zheng, Y. Yu, H.F. Hu, X.J. Liu.	806
Densification of nanocrystalline TiC ceramics by spark plasma sintering R. Chaim, L. Kleiner, S. Kalabukhov.	815