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万方数据



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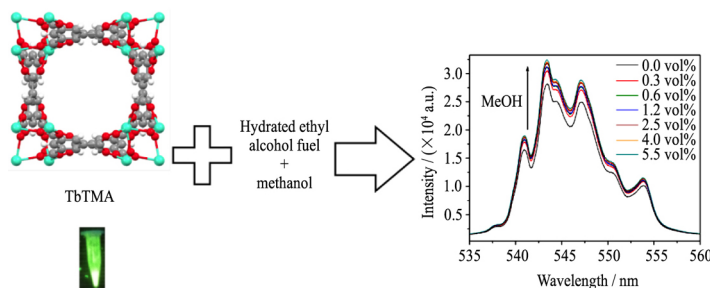
- Process mineralogy of Weishan rare earth ore by MLA
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Ivo M. Raimundo Jr., Priscilla P. Luz

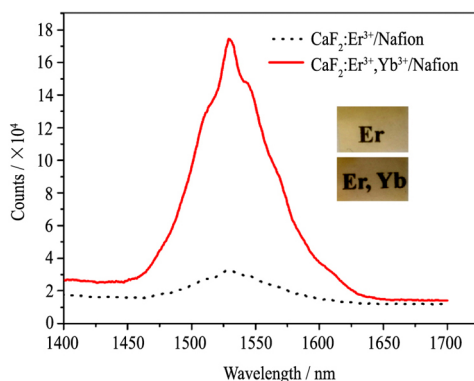


TbTMA was separately suspended in ethanol, methanol and ethanol fuel. TbTMA emission was dependent on the solvent, being ethanol fuel its best quencher. TbTMA was suspended in ethanol fuel adulterated with methanol at different portions. Tb³⁺ ion emission intensity increases as the methanol concentration increases. TbTMA acts as a promising sensor for detection of methanol in ethanol fuel

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- 232 Preparation and luminescent properties of CaF₂:Ln³⁺ (Ln:Er, Er/Yb)/Nafion composite films

Limei Song, Jianhua Gao, Minmin Liang,
Xiaojun Li, Jiangtao Li, Liuchang Wang

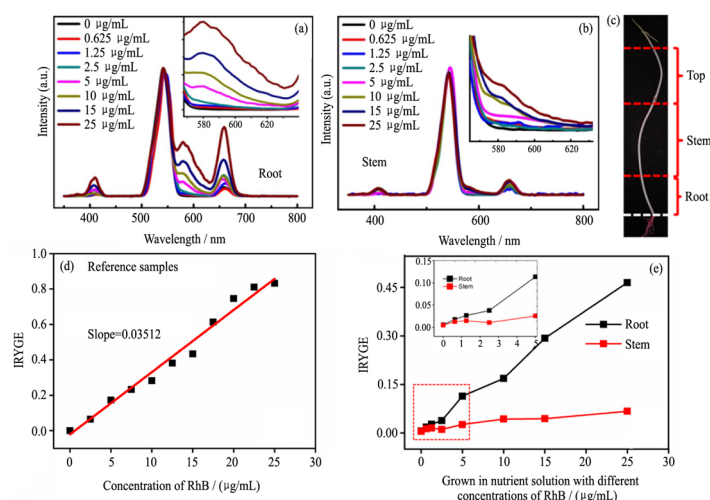


CaF₂:Er³⁺/Nafion and CaF₂:Er³⁺,Yb³⁺/Nafion composite transparent films were successfully prepared by dripping method and CaF₂:Er³⁺,Yb³⁺/Nafion composite film has stronger characteristic emission of Er³⁺ around 1530 nm with full width at half-maximum (FWHM) of 73 nm

J. Rare Earths, (37) 2019: 232-236

- 237 Tracing of dye molecules in living plants through NaGdF₄:Yb³⁺,Er³⁺ fluorescent nanoprobes

Xiaofeng Wu, Ya'nan Zhang, Shiping Zhan,
Jin Li, Guozheng Nie, Shigang Hu, Cong Yan,
Shaobing Wu, Shengbin Cheng, Junshan Hu,
Lichun Shi, Yunxin Liu

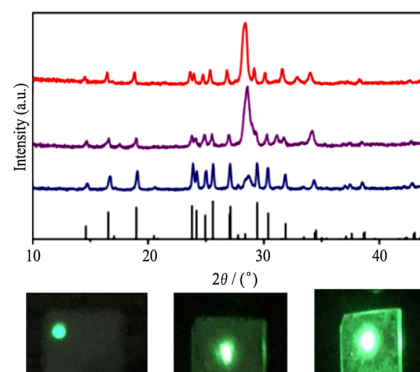


Fluorescent spectra of upconversion probes composited with the juice of root (a) and stem (b) part of the bean sprout under various growing environments; (c) The root, stem and top part selection of the grown bean sprouts; (d) The reference IRYGE of mixed solution of UCNPs, pure bean sprout juice and RhB with various concentrations; (e) The IRYGE of upconversion spectra at root and stem under various growing environments

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- 242 $\text{Er}^{3+}/\text{Yb}^{3+}/\text{Li}^{+}/\text{Zn}^{2+}:\text{Gd}_2(\text{MoO}_4)_3$ upconverting nanophosphors in optical thermometry

Anita Kumari, Lakshmi Mukhopadhyay,
Vineet Kumar Rai

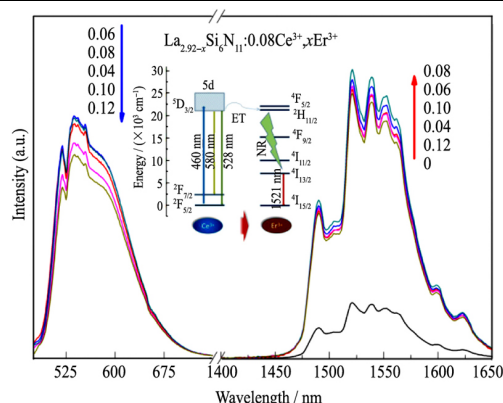


The structural and optical properties of $\text{Er}^{3+}/\text{Yb}^{3+}/\text{Li}^{+}/\text{Zn}^{2+}:\text{Gd}_2(\text{MoO}_4)_3$ nanophosphors were investigated. Enhanced photoluminescence emission bands are observed with the incorporation of non-lanthanide ion ($\text{Li}^{+}/\text{Zn}^{2+}$) due to crystal field modification. The pump power analysis, energy level diagram and decay curve analysis were performed to analyze the upconversion mechanism. The temperature dependent study suggests the applicability of the phosphors as making temperature sensor with maximum sensitivity $\sim 38.7 \times 10^{-3} \text{ K}^{-1}$ at 473 K

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- 248 Luminescent properties of Ce^{3+} , Er^{3+} co-doped $\text{La}_3\text{Si}_6\text{N}_{11}$

Yuan Xue, Ronghui Liu, Yuanhong Liu,
Huibing Xu, Guantong Chen, Xia Zhang,
Wei Gao, Ze Jiang

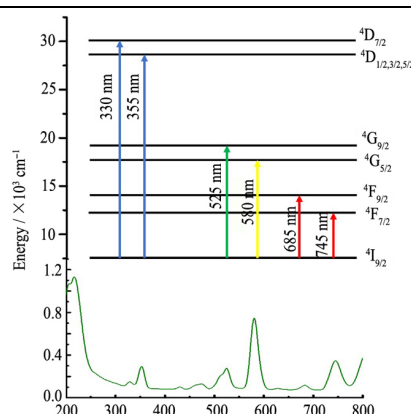


Energy transfer
process from Ce^{3+}
to Er^{3+} in
 $\text{La}_3\text{Si}_6\text{N}_{11}$

J. Rare Earths, (37) 2019: 248-252

- 253 Optical properties and radiative rates of Nd^{3+} doped zinc-sodium phosphate glasses

A.A. El-Maaref, Shima Badr, Kh.S. Shaaban,
E.A. Abdel Wahab, M.M. ElOkr

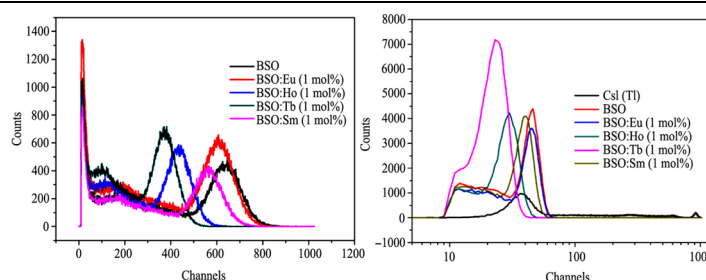


Excitation transitions from the
ground state to upper levels in
 Nd^{3+}

J. Rare Earths, (37) 2019: 253-259

- 260 Optical and scintillation properties of $\text{Bi}_4\text{Si}_3\text{O}_{12}:\text{RE}$ ($\text{RE}=\text{Eu}^{3+}$, Sm^{3+} , Ho^{3+} , Tb^{3+}) single crystals

Xuefeng Xiao, Jiayue Xu, Haicheng Wei,
Yaoqing Chu, Bobo Yang, Xuefeng Zhang



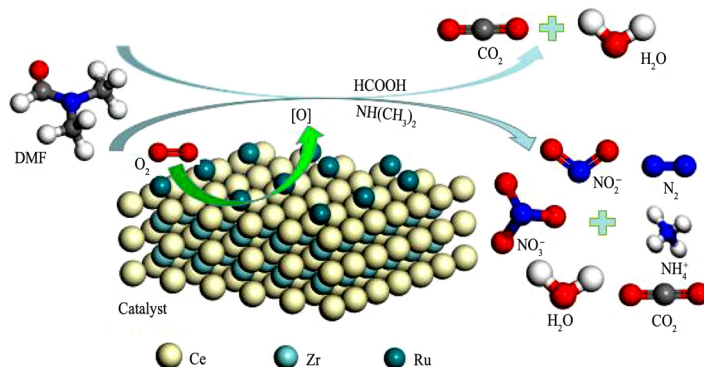
The relative light yield spectra with 600 V high voltage and the energy resolution spectra with a high voltage of 850 V are shown. The relative light yield of $\text{BSO}:\text{Eu}$ is 5.1% of $\text{CsI}(\text{Tl})$ crystal, which is slightly higher than the 5.0% for pure BSO. The relative light yield of $\text{BSO}:\text{Eu}$ is slightly higher and the possible reason is that the band gap decreases. So the O atoms can absorb the more part of incident radiation energy. This energy is more transferred to the luminescent center Bi^{3+} , and turns it to the excited state. The energy resolution is closely associated with the relative light yield; a smaller value of energy resolution correlates to better scintillation properties

J. Rare Earths, (37) 2019: 260-264

RARE EARTH CATALYSIS

- 265 Catalytic wet oxidation of N,N-dimethyl formamide over ruthenium supported on CeO_2 and $\text{Ce}_{0.7}\text{Zr}_{0.3}\text{O}_2$ catalysts

Jiawen Gong, Dongzhi Li, Li Wang,
Wangcheng Zhan, Yanglong Guo,
Yunsong Wang, Yun Guo

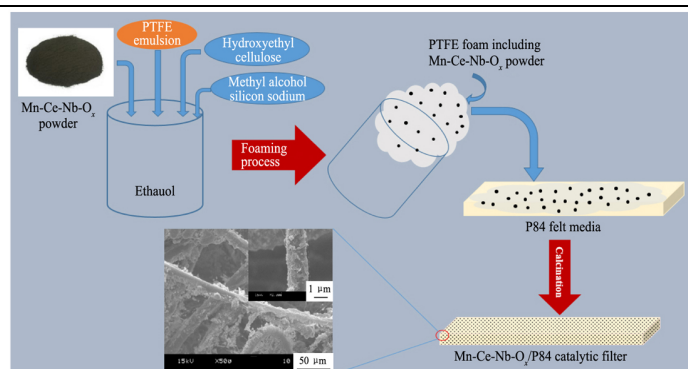


$3\text{Ru}/\text{Ce}_{0.7}\text{Zr}_{0.3}\text{O}_2$ shows better catalytic performance on DMF degradation, because the strong interaction between Ru and support can promote the transfer and activation of oxygen

J. Rare Earths, (37) 2019: 265-272

- 273 Mn-Ce-Nb-O_x/P84 catalytic filters prepared by a novel method for simultaneous removal of particulates and NO

Bo Yang, Qiong Huang, Mindong Chen,
Yuesong Shen, Shemin Zhu

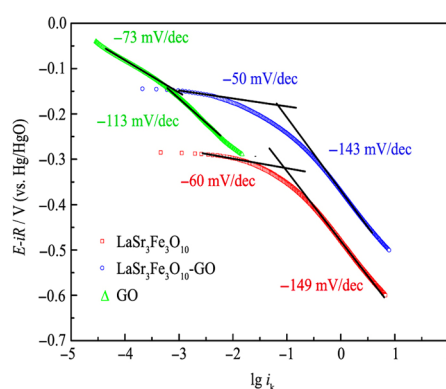


Schematic of foam coating method for preparation of Mn-Ce-Nb-O_x/P84 catalytic filter

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- 282 Electrocatalytic activity of $\text{LaSr}_3\text{Fe}_3\text{O}_{10}$ and $\text{LaSr}_3\text{Fe}_3\text{O}_{10}$ -GO towards oxygen reduction reaction in alkaline medium

Qin Li, Xie Zhou, Zhiqiang Wei, Guoping Du,
Guoguang Zhang, Nan Chen



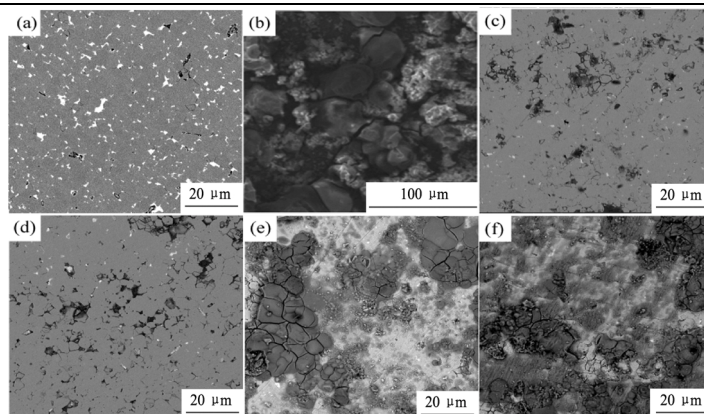
The electrocatalytic activity for ORR in alkaline medium was investigated using layered perovskite-like $\text{LaSr}_3\text{Fe}_3\text{O}_{10}$ and $\text{LaSr}_3\text{Fe}_3\text{O}_{10}$ -graphene oxide (GO) composite as electrodes. Both catalysts under alkalic conditions exhibit a two-step Tafel slope, suggesting a change in the reaction mechanism for ORR

J. Rare Earths, (37) 2019: 282-286

MAGNETISM AND MAGNETIC MATERIALS

- 287 Anisotropic corrosion behavior of sintered $(\text{Ce}_{0.15}\text{Nd}_{0.85})_{30}\text{Fe}_{\text{bal}}\text{B}$ permanent magnets

Xiaoning Shi, Minggang Zhu, Dong Zhou,
Zheng Jing, Meiling Zhang, Wei Li

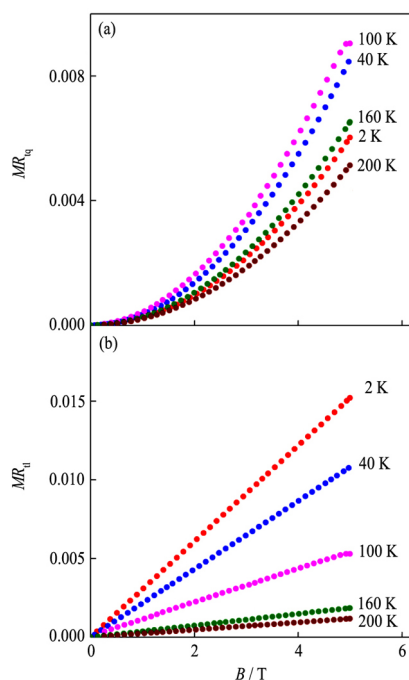


The corrosion morphologies of $c||$ surface ((a), (c) and (e)), N35 without Ce reported by the literature (b) and $c \perp$ surface ((d) and (f)) of $(\text{Ce}_{0.15}\text{Nd}_{0.85})_{30}\text{Fe}_{\text{bal}}\text{B}$ magnet in 3.5 wt% NaCl for 1, 3 and 6 d

J. Rare Earths, (37) 2019: 287-291

- 292 Transverse magnetoresistance peculiarities of thermoelectric Lu-doped Bi_2Te_3 compound due to strong electrical disorder

Oleg Ivanov, Maxim Yaprntsev,
Elena Danshina



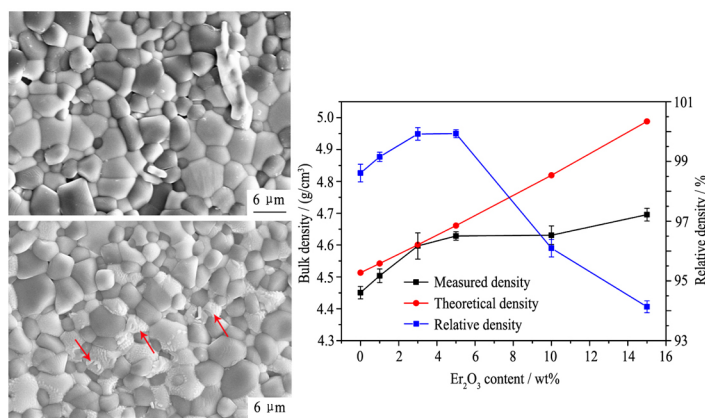
Separated quadratic and linear contributions in transverse magnetoresistance of $\text{Bi}_{1.9}\text{Lu}_{0.1}\text{Te}_3$ taken at various temperatures

J. Rare Earths, (37) 2019: 292-298

ADVANCED RARE EARTH MATERIALS

- 299 Influence of Er_2O_3 content on microstructure and mechanical properties of ZTA-TiO₂ composites

Yudong Sui, Li'na Han, Yehua Jiang,
Quan Shan



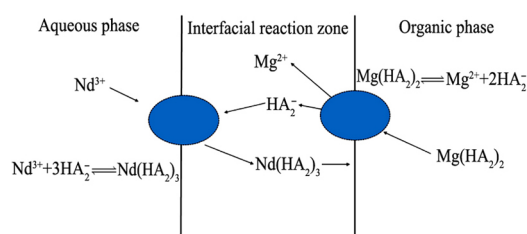
Surface of YSZ grains was covered by $\text{Zr}_3\text{Er}_4\text{O}_{12}$ when Er_2O_3 content exceeded 1 wt%. The relative density and mechanical properties were optimal when content of Er_2O_3 was 5 wt%

J. Rare Earths, (37) 2019: 299-304

CHEMISTRY AND HYDROMETALLURGY

- 305 Extraction kinetics of neodymium from chloride medium using HEH/EHP saponified with magnesium bicarbonate solution

Hao Lv, Xiaowei Huang, Zongyu Feng,
Meng Wang, Xu Sun, Xinlin Peng, Dali Cui,
Yihanna Hu

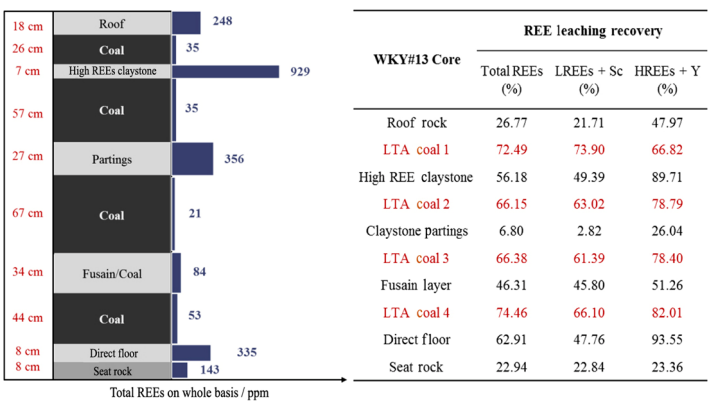


The extraction reaction of Nd(III) from chloride medium takes place under a mixed kinetic regime, where extraction of Nd(III) is controlled by both diffusional process and chemical reaction. The rate-determining stage is the forming of extracted complex of Nd(III) and Mg-HEH/EHP

J. Rare Earths, (37) 2019: 305-311

312 Leaching of rare earth elements from an Illinois basin coal source

X. Yang, J. Werner, R.Q. Honaker

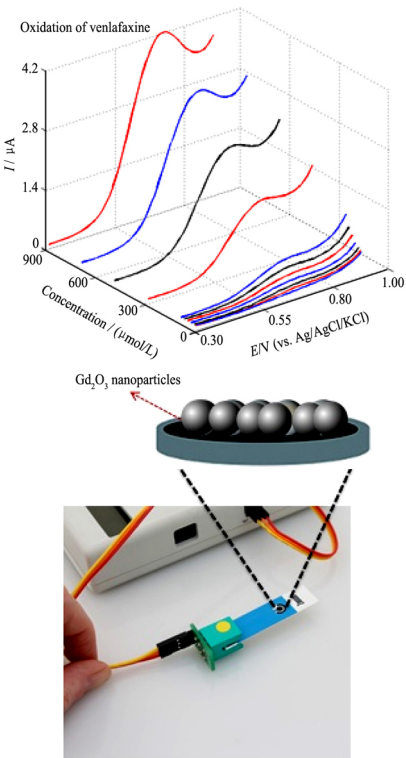


J. Rare Earths, (37) 2019: 312-321

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322 Voltammetric determination of venlafaxine as an antidepressant drug employing Gd₂O₃ nanoparticles graphite screen printed electrode

Hadi Beitollahi, Shohreh Jahani, Somayeh Tajik, Mohammad Reza Ganjali, Farnoush Faridbod, Taher Alizadeh

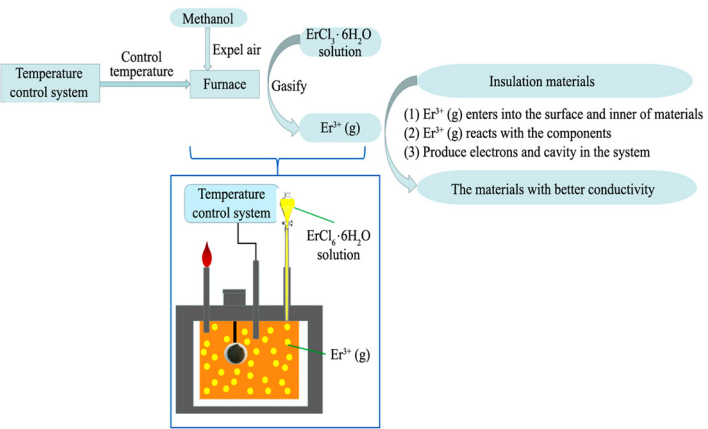


A novel electrochemical nanosensor for determination of venlafaxine was constructed

J. Rare Earths, (37) 2019: 322-328

329 A novel inexpensive conductive material: Er-modified maifanite by gaseous penetration technology

Liyong Qi, Sue Hao, Suisheng Li, Tiancheng Sun, Xinrong Liu

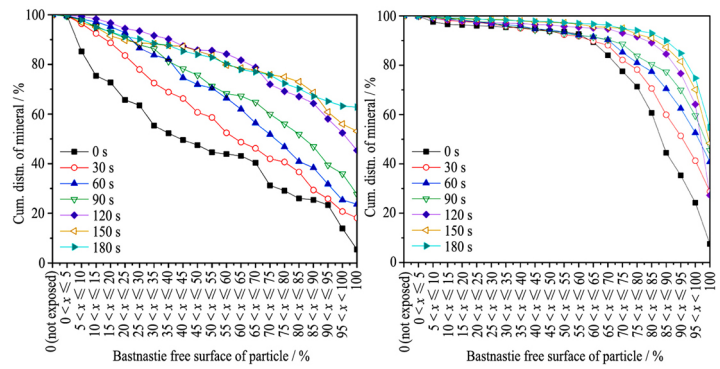


ErCl₃·6H₂O solution was gasified at the penetration furnace, and the Er³⁺ (gas) entered into the surface or inner of Maifanite powders, then reacted with the components of maifanite. Since the ion radii of Ca²⁺, Na⁺ and Er³⁺ is similar, we can infer that Ca²⁺ and Na⁺ were replaced by Er³⁺. When Ca²⁺ and Na⁺ were substituted by Er³⁺, electron compensation would be produced, which made the electron concentration in the system improve, resulting in a significant improvement in the conductivity of the modified powders

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334 Process mineralogy of Weishan rare earth ore
by MLA

Caili Xu, Chengbin Zhong, Renliang Lyu,
Yaoyang Ruan, Zhenyue Zhang, Ru'an Chi



Liberation of bastnaesite and carbocearnite by free surface

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